

A sociological analysis of associations between the  
family and well-being: roles, responsibilities, and  
relationships

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This thesis is dedicated to my daughter, Mollie and my husband John.

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# Abstract

Asking people about their state of emotional well-being or their self-evaluations of life satisfaction represents a resource which can be used to contribute to knowledge concerning overall well-being and social progress, helping to avoid a narrow focus on purely economic indicators.

Whilst concerns over measurement and validity have been raised, such measures have been used to research individual well-being across a vast range of topics, particularly in the field of economics. There has been much less attention from a more sociological perspective.

This thesis aims to bring together the topics of well-being and sociology, via a focus on the family. The family is a long established area within sociological study, and contains a number of sub-areas that may lend themselves well to being connected to the topic of well-being. A focus on its inherent interrelations and dynamics may help to ascertain whether the ‘individual’ topic of well-being can be understood alongside the more ‘social’ topic of the family.

This thesis utilises data from the British Household Panel Survey (BHPS), a large scale survey which tracks the same people over 18 years. The BHPS was later incorporated into Understanding Society, and this data source is used for the third chapter. It is found that associations exist between a range of family related roles and experiences, and well-being. The importance of family bonds and relationships to well-being were suggested, between partners and also between parents and children. However also of note were the gendered differences that exist within these associations, and those between different dyads of family members. The impact of changes in family roles and responsibilities was also supported, and how these may impact upon well-being.

The thesis is presented in the following order. Each chapter contains an introduction, a review of the relevant literature, an overview of methodology, the results, a discussion and a conclusion. Following on from the chapters, is a conclusion to the whole thesis.

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# Introduction

## Well-being research

The topic of 'well-being' covers a vast range of topics, such as health, happiness, and local environments, and it is tied up with notions of the 'progress' and 'success' of a society. A society with advancing levels of well-being can be understood as a functional and developing place which is effectively organised to promote positive living and working environments for its members.

There has often been a tendency to measure well-being in predominantly economic terms, for example the GDP of a country. This has come under criticism in recent years, with a growing recognition of wider and more diverse indicators of social and economic progress. This is reflected in a number of research initiatives aimed at developing such measures of well-being and producing research which reflects the multi-faceted nature of this topic. For example, the European Commission established the 'Beyond GDP' initiative, whilst the Office for National Statistics has begun to collect data concerning personal well-being, culminating in a number of reports aimed to give a view of quality of life in modern society.

One particular strand of this revitalised research concerning well-being is a focus on the emotional well-being of members of society, and how satisfied they are with various domains of their life, and life overall. The OECD describes this inclusion of 'subjective well-being' (SWB) - asking members of society directly how they feel about their lives - as a core component of accurately measuring quality of life and the progress of society. It is therefore a more 'micro' approach as opposed to the more 'macro' indicators, such as GDP.

This is also reflected in a growth of academic research which makes use of these subjective indicators of well-being. For example, an increasing amount of attention has been paid to the causes and consequences of self-reports of emotions and levels of life satisfaction. These measures share clear overlaps with other, more extensively studied topics such as physical health and psychological disorder, which also can be seen to come under the umbrella term of 'well-being'. In contrast however, the focus on general everyday emotion and cognitive judgements about one's life represent a move away from medicalised topics such as depression or other mental disorders, and instead a focus on that which is commonly experienced by all members of society on a daily basis, thus highlighting how well-being can be of importance even when not clinically recognised. It has been argued that a wider understanding of 'well-being' and an appreciation of the non-medical aspects can also serve to unite disciplines as it is seen as a multi-layered, multi-faceted term of which a number of theoretical and methodological stances can contribute to (Cronin de Chavez et al, 2005).

The vast majority of studies in this area have been undertaken from either a psychological or economic viewpoint. In psychology, a focus on positive emotions and happiness has tended to be referred to as 'positive psychology' (Sheldon and King 2001, Gable and Haidt 2005), whereby focus is paid to optimum human functioning and what makes people thrive, rather than a problem focused model investigating mental disorder. Other work has referred to 'mental health' as opposed to 'mental illness', which relates to general social, emotional and psychological well-being (Corey, 2005).

In economics, survey questions which ask the respondent about their general state of well-being, such as how satisfied they are with their life, have been analysed using econometric techniques to investigate a vast and varied range of

topics. SWB is defined by Diener et al (1999) as “a broad category of phenomena that includes people’s emotional responses, domain satisfactions and global judgements of life satisfaction” (p277). This therefore incorporates both affective responses and also cognitive evaluations, which while highly correlated, have also been shown to be separate constructs (Diener et al 1999).

For example, the so-called ‘Easterlin Paradox’ (Easterlin 1974) found that an increase in income generally does not lead to an increase in happiness. Whilst richer people tend to report higher happiness than poorer people, rising levels of income over time have not been associated with increases in happiness. He notes that since World War II in the United States, happiness levels have remained fairly stable despite marked increases in average income. A number of possible explanations have been proposed, such as the changes over time in subjective norms upon which judgements are based.

Associations between life events and SWB have also been documented, for example unemployment has consistently been found to be negatively related to SWB (eg. Clark and Oswald 1994, Lucas et al. 2004), whilst being married tends to be positively related (Kim and McKenry 2002, Inaba et al 2005.). Various studies have also made use of longitudinal data, and therefore been better able to consider causal directions, taking into account possible selection effects and unobserved variables to improve knowledge further. Longitudinal data sets also allow processes of adaptation to be studied. For example, disability is shown to be associated with lower well-being, although initial declines dissipate over time suggesting some degree of adaptation taking place (Oswald and Powdthavee, 2008).



## Concerns over researching well-being

Whilst there has been a growth of research concerning SWB, there have also been a number of concerns raised about the measurement of such variables, and more specifically the reliance on self-reported information. For example, Schwartz and Strack (1991) and Mazahari and Theuns (2008) note that SWB findings may differ according to the use of different scales and the order of questions. It has also been suggested that assuming SWB to be a relatively stable trait is inaccurate, as it may be heavily influenced by current, momentary mood at the time of the survey taking place (Schwarz and Strack 1991, Eid and Diener 2004). Social desirability is also a potential measurement problem, with it being likely that low levels of SWB may be under-reported (Chen et al 1997, Soubelet and Salthouse 2012).

Whilst these potential measurement problems cannot be denied, there are also suggestions that measuring well-being via self report measures can be valid and useful, and that potential causes of error should not be overestimated. Global self report measures of SWB have been found to have good internal consistency (Larson et al 1985) and convergence with daily mood reports (Sandvik et al 1993, Eid and Diener 2004). Eid and Diener (2004) argue that SWB can be understood as more of a stable trait than a variable trait, with current mood exerting only a weak effect upon it. In response to criticisms of social desirability, Diener et al (1991) found little benefit of controlling for social desirability when comparing between self reported and non-self reported measures of well-being.

Having said this, Diener et al (1991, 1999) do note the need to be cautious and considerate of the potential for measurement error. Whilst effects of factors such as current mood and social desirability should not be over-estimated, they are still potential sources of error that should be controlled for if possible (Diener et

al, 1991). They advise that “well-being measures should be administered under constant or systematically varied conditions as the measurement situation can influence reports” (Diener et al 1999, p278), and where possible a full range of well-being measures, such as those related to mood, emotions, cognitive judgements and physiology, should be used and compared. Furthermore, multiple measures of well-being collected over time are desirable, which lessens the potential for current mood to influence overall results, as opposed to a single measure which may be biased by a negative life event that has recently occurred. Further reasons for apprehension over subjective well-being research may also stem from theoretical, rather than solely methodological, grounds. For example, it has been noted that well-being has rarely been a topic of sociological research. Veenhoven (2006), a noticeable exception to this, has provided a number of possible reasons for what he refers to as ‘sociology’s blind eye for happiness’. He notes that sociology is generally concerned with issues of a collective nature, whereas happiness and well-being are understood to be individual matters. Attention is more likely to be paid to collective standards of societal well-being instead. Furthermore, issues relating to well-being are typically seen to be a matter of the mind, and therefore are deemed to be more suited to psychology “because it is a mental state and not a condition of society” (Vennhoven, 2008 :46).

This is, in Veenhoven’s (2008) view, a mistake, as matters relating to subjective well-being can in contrast be seen as having social significance. He argues that one of the main aims of sociology is to understand and unveil what makes society a better place to live. Understanding pre-conditions for society’s members to feel well and positive is therefore something that sociology should concern itself with. Furthermore, happier citizens are more likely to be healthier, more productive,

Towards a more sociological view of well-being; incorporating the family and more socially active, and fostering well-being therefore feeds back into society in a number of beneficial ways (Veenhoven 2008). Bartram (2012) also echoes these points, noting that a closer focus on well-being helps to link sociological research to social policy, with the aim of improving societal well-being and the experience of society for its members being the main aim of much sociological research.

### **Towards a more sociological view of well-being; incorporating the family**

How can a more sociological perspective be applied to the study of SWB? One such way may be to focus on a topic well established in sociological research and investigate how this relates to well-being. One such topic which may lend itself to bridging the gap between sociology and well-being research is the family. The family has been a topic of sociological enquiry for a considerable time, and is associated with a vast range of subtopics and theoretical ideas that may be applicable to well-being studies. Furthermore, it may help to provide a bridge between the social and the individual, as linkages between the social network of the family – with its interrelations and dynamics – and individual well-being, are investigated, thus challenging the solely ‘individualised’ view of well-being which was previously noted as a reason for sociology to ignore this topic.

Charting the development of a sociological approach towards the family, White (2005) notes how it was dominated in the 1950’s and 60’s by a functionalist perspective, in particular the work of Talcott Parsons (1959). Parsons viewed the family as a social system which performs a number of essential functions which serve to maintain the order and efficiency of society. He describes the change

Towards a more sociological view of well-being; incorporating the family from large, extended families to smaller, more geographically mobile nuclear families, in which clear roles are defined and functions performed.

The work of Parsons has been heavily critiqued on a number of grounds over the years, as new and competing theories have come on board the family sociology agenda. For example, the view that the family is functional and harmonious has been challenged by radical psychiatrists such as Cooper (1974) who emphasise the 'darker side' of family life and how the family environment can in fact be harmful and dysfunctional for individuals. Feminist critiques (eg. Barrett and McIntosh, 1991) also adopt a more critical view of family life, drawing attention to patriarchal ideologies and practices which position women as subordinate to men within the family unit.

A more contemporary trend in sociological family studies, is the focus on changing family dynamics and compositions, such as the growth of step-families and single-parent families (White, 1995) and family formations amongst homosexual partners (Calhoun, 2002). This also therefore serves to critique older functionalist work by moving away from the traditional nuclear family and recognising a wider understanding of family types. Stacey's (1996) work on the postmodern family characterises it as being based on flexibility and diversity, with choice over family connections, relationships and behaviours. It has therefore been argued that it is more accurate to think of 'families' rather than 'the family', reflecting the plurality and differentiation that exists (Gittins 1993, Gabb 2008).

Other, more contemporary views on the family have suggested that late modernity has brought about increasing individualism which has altered family life (Beck 1986, Beck and Beck-Gernsheim 2002). Social life is now associated with more choice and decision, which removes more traditional norms and values

which once governed the family. Members of society are now free to shape their own 'chosen biographies' (Beck, 1986:206) as the structures which once determined their options become more detached. As a result, family types have become more diverse, the family role and position of women is renegotiated and family bonds may be altered.

### **Sociology, the family, and well-being:**

From this brief overview of sociological approaches of the family, it can be seen that in contrast to one main school of thought dominating the field, such as functionalism, a vast and varied range of viewpoints and different areas of focus now exist. However, it has been remarked that the topic of emotions and well-being have rarely been investigated or theorised in relation to family life (White and Klein 2008, Morgan 2011). This is somewhat surprising, considering that emotions are a key element of family life, evidenced in family relationships, interactions and behaviours (White and Klein 2008).

Duncombe and Marsden (1998) do focus on 'emotion work' in close relationships, for example how married couples may alter or suppress emotions for the benefit of each other. A focus on gender is also included by noting how wives are more likely to engage in emotion work that benefits and nurtures their husband whilst men direct their emotions more towards their employment demands. This work is very qualitative in nature and focuses only on interactive emotive processes. Whilst therefore going some way to introduce the topic of well-being into family studies, it does not highlight the larger scale trends, patterns and statistical associations that the economics based research concerning SWB does.

Conversely, there are some studies which have investigated family relations and well-being using statistical methods and large data sets, thus highlighting

associations between the topic of the family and that of SWB. These have however lacked a more sociological perspective, tending to be mostly empirical in nature and lacking more sociological considerations of the family. For example, there are a number of studies relating to marital satisfaction (eg. Snyder et al 1979, Bradbury et al 2000, Twenge et al 2000) and also regarding the association between marital status and well-being (eg. Wood et al 1989, Coombs 1991, Diener et al 2000), yet they leave certain, more sociologically orientated, questions requiring further testing. For example, how has the changing nature of the family impacted upon associations between marriage and well-being, and do results differ by gender, considering feminist arguments concerning gender inequality within marriage?

Sociological research has however contributed more extensively to the topic of mental illness. A considerable amount of research has focused on a vast range of areas, such as the social distribution of mental illness, gender and mental illness, the medicalization of mental illness, and labelling and mental illness (eg. Busfield 1996, 2001, Rogers and Pilgrim 2010, Aneshensal et al 2012). However, only Rogers and Pilgrim (2010) make a mention of non-clinical well-being and happiness, and this is only brief and without specific reference to the family. Whilst only Aneshensal et al (2012) refer to topics related to the family, and then only primarily in relation to clinical disorders.

To summarise, whilst there are therefore loose ties currently between SWB research, the family and sociology, there is a lack of strong and explicit connection between them. There is a need to gain a better understanding of the sociological nature of the family and its associations with well-being. This would help to bridge existing gaps in knowledge, enhancing the applicability of both SWB and family studies. It would also help to more fully integrate the study of

SWB into sociology and support the view of SWB being an interdisciplinary topic that is meaningful from a number of different perspectives.

## **Structure of this thesis**

The structure of the thesis will now be described. It consists of three papers, which whilst all consider familial aspects of well-being, focus on different areas. They can therefore additionally be thought of as three stand-alone papers as well as an integrated thesis.

Chapter 1 focuses on marital status, and the extent of the protective effect of partnerships when stressful events occur. A considerable amount of previous research has highlighted psychological and emotional benefits of marriage, however, less research has focused on the moderating role of marriage. How does it interact with particular stressful life events, is it consistently beneficial whatever the context? In this chapter, a transition into a state of poor health and unemployment are the stressful events included in the analysis. Are these associated with smaller declines in well-being for those who are married compared to those who are single?

Furthermore, there has been much less focus on the marital status of cohabitation. The current state of knowledge therefore does not reflect contemporary changes in family forms and relationship types, whereby many more couples now cohabit for a period of time before marriage, or even choose to cohabit instead of marriage. Does cohabitation also confer protective psychological benefits? And how do they compare to that of marriage?

Finally, do gendered social roles and norms influence the experience of close relationships? Previous findings have suggested marriage may be more beneficial for men than women, whilst feminist scholars have also emphasised

the negative aspects of marriage for women. It remains to be tested whether this is also the case when particular life events occur, and when both marriage and cohabitation are taken into account.

Overall therefore this paper contributes to social knowledge concerning associations between marital status and well-being, but extends current findings in a number of ways. The moderating role of marital status is investigated in relation to specific life events, a focus on cohabitation as well as marriage is included, and differences by gender are also tested.

Chapter 2 investigates aspects of the parent-child relationship and well-being. The influences of a) parent-child relationship conflict and b) parental well-being upon various measures of youth well-being are modelled. Whilst there has been a growing wave of sociological commentary which suggests the family is in decline as individualism overrides traditional family bonds and attachments, there has also been suggestions that a closer focus on the more intimate and personal aspects of family relationships, ties and interactive processes show the continuing importance and worth of the family.

Previous research has suggested that more parent-child conflict is negatively related to youth well-being. However there has been a tendency to focus on clinical measures of well-being such as depression and conduct disorders and less is known about the extent to which conflict levels may relate to non-clinical measures such as life satisfaction. Many existing studies do not measure conflict directly, nor take into account gendered differences or control for a vast range of other factors that may negate parental influences in adolescence.

There has been less research concerning potential associations between child and parental well-being. Studies that have focused on emotional transmission between family members have tended to focus on parents and infants, and



therefore less is known whether effects remain into older childhood, when a range of other factors, such as those relating to peers and school, may become more salient.

This paper aims to address these gaps in current knowledge and consider the state of parent-child relations within the family unit and their connections to well-being. Is parental influence upon youth-well-being maintained despite increasing individualism and the developmental changes of adolescence? Differences according to the gender of youth and of parent are also tested for, investigating whether particular parent-child dyads are associated with particular patterns of effect.

Chapter 3 also focuses on family life and well-being but more specifically on the family 'event' of having a baby and the impact of this upon sleep habits, and subsequently well-being. This paper therefore not only combines the topics of family life and well-being, but incorporates the burgeoning area of the sociology of sleep.

Having a baby is a major life event, transforming a couple into parents as they take on this new social role and experience a vast range of changes. One area of change that has received relatively less attention than others is the changes to sleep habits that tend to follow the birth of a baby. Of the information that does exist, implications for well-being are not always addressed. This paper therefore aims to both highlight the impact of a new baby upon sleep patterns and also test whether they are related to well-being levels. Mothers and fathers are analysed separately, and attention is also paid to mothers of differing social and demographic characteristics.

This paper therefore combines a number of topics and highlights the processes of change within family life as new social roles are occupied and changes to everyday lifestyles and behaviour are experienced.

# Chapter 1

## 1. The moderating role of marital status when stressful life events occur

### 1.1. Abstract

The moderating role of marital status is investigated in the association between well-being and two stressful life changes; becoming ill and becoming unemployed. Prior research suggests being married, and to a certain extent being in a cohabiting relationship, is advantageous for well-being, and it is therefore predicted that being in one of these partnership statuses will be associated with smaller declines in well-being when these events occur. Men and women are analysed separately to additionally test for any gender differences, as it has been argued that marriage can benefit men more so than women.

Panel data from the British Household Panel Survey is used to investigate associations between these life events, marital status and well-being. A range of marital statuses are compared; being in a partnership (married or cohabiting) is compared against not being in a partnership (divorced, widowed, separated or never married), being in a partnership is also compared against the never married only, and being married is compared to cohabiting. Two well-being outcomes are used; the General Health Questionnaire (GHQ) and a measure of life satisfaction. Fixed effects regression models, which control for time invariant unobserved variables and model change at the individual level, are used to test associations.

It is found that being in a partnership (married or cohabiting) is associated with improved well-being, and that benefits to well-being are larger for men. No difference in well-being outcomes are found when comparing between the married and those who cohabit. When poor health occurs, being in a partnership is beneficial for both men and women, although there is some evidence to suggest men are benefitted more. When unemployment occurs, being in a partnership is advantageous for women, but no benefits for men are found. Men do however benefit from non-kin forms of social support. There is no evidence for declines in well-being associated with poorer health or unemployment to significantly vary between the married or cohabiting. It therefore appears to be the protective functions of being in a partnership that are helpful, rather than specifically being married.

Results therefore indicate the complex and varying associations between life events, marital status, gender and well-being. These findings contribute to existing knowledge by investigating marital status in relation to life events and gender differences, and also including a specific focus on how the effects of marriage compare to cohabitation.

## **1.2. Introduction**

One such area of social life that is thought to be associated with well-being is a person's marital status. Having a close, personal relationship has been suggested to foster a sense of belonging and integration, whilst acting as a source of social and emotional support. However, despite a significant amount of research concerning marital status and well-being, there are a number of areas that could be clarified and added too. This paper therefore seeks to build upon

previous work on this topic, and enhance current states of knowledge by focusing on a number of less researched and unclear areas.

Firstly, this study specifically focuses on the *moderating* role of marital status. Whilst previous studies may have found that married people are happier than those who are single, less is known about how being married may help when stressful events occur. Is marriage still protective when a person becomes unemployed for example, or does the added burden of having to contribute to household bills, or feelings of guilt over a partner having to take on extra work, actually worsen declines in well-being?

Secondly, not all studies concerning marital status and well-being have taken gender into account, and therefore whether marital status influences the well-being of men and women differently, is unclear. Men and women occupy a different set of social role demands and expectations, and therefore may have differing experiences and needs when stressful life changes occur. Does being in a partnership benefit them both equally? Men and women are analysed separately in this study to ascertain whether effects vary.

Thirdly, the family has undergone some changes in structure and norms. For example, in contemporary society, many couples now cohabit instead of, or before, marriage. However current knowledge concerning marital status and well-being does not reflect this social change, with less being known about associations between cohabitation and well-being. Is cohabitation protective when stressful events occur, and how does it compare to the state of marriage?

This study therefore has three main areas of focus; a general focus on the moderating role of marital status, gender differences that may exist, and the effects of cohabitation compared to marriage.

On a methodological note, many studies concerning marital status and well-being use cross sectional data. This study makes use of panel data, obtained from all waves of the British Household Panel Survey (BHPS), a large scale panel survey. This enables the tracking of the same individuals over time and can therefore measure change at the individual level, whilst controlling for time invariant unobserved heterogeneity.

This paper begins with an overview of existing literature relevant to the topic. The methodology used will then be discussed followed by the presentation of the results. These are then discussed in light of the existing literature. A summary and conclusion are then provided.

### **1.3. Marital status, well-being and stressful life events**

#### ***1.3.1. Marriage and well-being***

The view of marriage as being beneficial for the individual and society can be evidenced in the original ideas of social theorists such as Durkheim, who in his work on the social aspects of suicide (1897) argued that marriage is a protective state as it increases experiences of social integration. Functional sociologists such as Parsons (1951) also adopted the view of marriage as beneficial, by stating that it contributes to the ideal arena for forming a family, stabilising adult personalities and socialising the young. Marriage was therefore presented as functional for both the individual and for society as a whole.

The view of the benefits of marriage have stood the test of time and many empirical studies have found support for various protective effects of marriage, such as the state of marriage being associated with improved levels of a range of well-being outcomes. Horowitz et al (1996) found that well-being levels were higher for individuals who become married compared to those who remain single.

### 1.3 Marital status, well-being and stressful life events

Simon (2002) found that becoming married was associated with less depressive symptoms, whilst the loss of a spousal role was associated with an increase in symptoms. Gove et al (1983) concluded that marital status is one of the most powerful predictors of well-being. Similar findings concerning the benefits of marriage to psychological well-being have also been found elsewhere (Umberson 1987, Hahn 1993, Waite 1995, Ross 1995, Marks 1995, Kim and McKenry 2002, Inaba et al 2005). Positive associations have also been found with life satisfaction (Holt et al, 2008), physical health (Waltz et al 1998, Kiecolt Glaser and Newton 2001) and mortality (Kravdal 2001, Manzoli et al, 2007).

Various reasons for this relationship between marriage and improved well-being have been suggested. Waite (1995) suggests that marriage serves to increase material well-being by enabling a pooling of financial resources, a point also made by Hahn (1993) who explains the association by financial gains such as increased income and home ownership. Being married has also been argued to help prevent the uptake of risky health behaviours and enable partners to exert a form of social control and monitoring over each other (Umberson 1987, Waite 1995). The provision of social and emotional support from marriage have also commonly been noted as a reason for associations between marriage and improved well-being (Waite 1995, Ross 1995).

However, despite this considerable amount of research concerning marriage and well-being, there are a number of areas that need to be taken into account and clarified; the causal pathways between marital status and well-being, gender differences, and the rise of cohabitation. Attention will now be turned to each of these.

#### *1.3.2. Selection into marriage*

The causal relationship between marriage and well-being is an issue which should be considered when examining findings concerning the benefits of marriage. It may be the case that being married confers positive effects upon an individual's well-being (marriage protection hypothesis, or social causation hypothesis), however it may also be the case that certain individuals – such as those with higher or lower well-being prior to marriage – have differing likelihoods of selection into marriage (social selection hypothesis). An individual with higher well-being may be more likely to get married, and therefore their higher well-being post marriage is actually a reflection of their prior characteristics.

Some studies have attempted to investigate these differing arguments, making use of panel data which tracks the same individuals over time. This enables time invariant unobserved characteristics to be controlled for. One such time invariant characteristic which may be useful to control for when researching marriage and well-being is personality. It may be assumed that certain individuals - such as those with particular personality traits - may have differing likelihoods of selecting into particular marital statuses.

Some studies have found evidence of a selection effect (Johnson 1991, Mastekasa 1992), whereas others have found evidence of both a causal and selective effect (Waldon et al 1996, Simon 2002), suggesting that both mechanisms account for the association. Some studies have included a control for levels of well-being prior to marriage, and found the protective effects of marriage remain (Horowitz et al 1996, Kim and Mckenry 2002). Marks (1995) controls for various personality variables which could be theorised to suggest differing likelihoods of selection into marriage, and finds that the selection argument is not upheld.



### 1.3 Marital status, well-being and stressful life events

Considering the selection argument therefore adds complexity to the consideration of associations between marital status and well-being. This study seeks to investigate not only whether marriage has a protective effect, but also if this is also the case even when personality traits are held constant.

#### *1.3.3. Gender differences*

Whilst it has been theorised that marriage is a beneficial, functional and protective state for individuals, it has also been noted that this view may be too utopian and ignore other, more negative aspects of married life. This argument, concerning the darker side of marriage, is often one of feminist theorists who assert that men benefit more from marriage than women do, and that marriage can in fact be detrimental to women's well-being, subordinating and oppressing them. Bernard (1972) claimed that there are 'his and hers' marriages, with men benefitting far more than women, as they have more control and influence. Focus has been paid to issues such as unequal power relations, domestic violence and gendered roles of caring and household tasks (Oakley 1974, Anderson 1997, Pateman 1998).

Some empirical work has also echoed the assertion that the experience of marriage may differ for men and women. Gove and Tudor (1973) found that married women had higher rates of mental health problems than married men, and also higher rates than non-married women. They therefore argued that it was marriage that played an important role in poorer well-being amongst women, and that whilst it benefits men psychologically, it can actually have the reverse effect for women. Gove and Tudor (1973) argued that this was due to gendered roles, whereby women may give up employment to raise a family and the norms and expectations they became subject too had a depressing effect.

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Other studies have also found that marriage appears to benefit men more strongly (Gove et al 1983, Johnson 1991).

However, in contemporary society it is becoming less common for women to give up employment when they marry and start a family, and therefore the argument of Gove and Tudor may no longer bear relevance. Simons (2002) also criticises the work of Gove and Tudor (1973) due to primarily focusing on 'female orientated' emotional problems such as depression, and argues that there is a need to study a range of outcome measures which may be affected by gender. Some studies have done this and found mixed results, for example Horwitz et al (1996) find marriage to be associated with less depressive symptoms in men, yet less alcohol related problems in women. Others have found no evidence of a gender difference (Stack and Eshleman 1998, Kim and McKenry 2002).

The view of marriage being universally beneficial to well-being is therefore critiqued by an opposing view concerning the more negative and potentially harmful aspects of marriage, in particular for women. There are however mixed results concerning how gender may interact with the association between marriage and well-being, and further research concerning this would help to clarify any relationship. This study therefore aims to investigate not only associations between marital status and well-being, but also any gender differences that may exist.

#### ***1.3.4. Marriage and cohabitation***

Many studies concerning marriage and well-being focus predominantly on married couples and do not include those who cohabit. This may be due to only having data on those married, or even the decision to omit cohabitantes from the analysis even when data is available (eg. Simon, 2002). However, cohabitation has become increasingly common in contemporary society (Kiernan 2001,

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Chambers 2012) with many couples choosing to cohabit before they marry, or cohabiting as an alternative to marriage. Manting (1996) notes how marriage is no longer a precursor to starting a family, or living together, and that social stigma concerning cohabitation has greatly decreased. Furthermore, with women's greater involvement in the labour market, they are no longer dependent on marriage for financial security or for a means to leave the parental home. The rise in cohabitation suggests there is a need to also consider cohabitees in research, and generate further understanding of this marital status.

How does cohabiting differ to marriage, and how may this impact upon associations with well-being? One view is that cohabiting entails less commitment, and reflects "the decline in willingness to invest in permanent partnerships" (Chambers, 2012:45). In this view, cohabitation may be associated with less security and less support than marriage, and it would be expected that the protective effects of cohabitation would be less than that of marriage. However, cohabitees may also experience more flexibility and freedom than married couples and less of the sources of stress that married couples typically encounter (Horowitz and Raskin White, 1998). Furthermore, levels of commitment, security and support may still be high in a cohabiting partnership; Ermisch (2000) found that approximately 73% of cohabiting couples expect to marry, suggesting long term plans are part of the relationship and that cohabitation is usually part of the process of becoming married, rather than an alternative. In this view, cohabitation can be hypothesised to be associated with protective effects upon well-being.

Existing research findings reflect these opposing arguments. Ross (1995) and Joutsemmiemi et al (2006) found that levels of depressive symptoms were similar between those who cohabit and those who are married, and that both had

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higher well-being than those who are single. Such findings suggest that it is being in a partnership that is associated with improved well-being, rather than specifically being married. Others have found that whilst cohabitation is preferable to living alone, it is associated with lower well-being than marriage (Kurdek 1991, Stack and Eshleman 1998, Kim and McKenry 2002) suggesting that there is something specific to marriage that is associated with the most benefits to well-being. Howowitz and Raskin White (1998) found mixed results, with no difference between cohabitees and married persons in terms of depressive symptoms, but some evidence of more alcohol related problems amongst cohabiting men.

The lack of many studies investigating marital status and well-being to include cohabitation as a marital status category – be it grouped with marriage or used as a reference group to be compared against marriage – suggest a need for further research into this marital status. Furthermore, of those studies which have included cohabitation, results are mixed. Further clarification would therefore be useful and beneficial in understanding the associations between different partnerships formations and well-being in contemporary society. This study therefore aims to investigate both marriage and cohabitation in relation to well-being, and also asks whether any differences in effects occur; does marriage exert more of a beneficial effect than cohabitation?

#### ***1.3.5. Marital status as a moderator: poor health***

There has therefore been considerable and extensive empirical work concerning the association between marital status and well-being. Although, as has been noted, there still remain unclear areas that could be empirically tested to advance understandings, such as the selection problem, gendered differences and cohabitation. Another extension to existing knowledge is the role of marital

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status as a potential moderator between stressful life events and well-being. Rather than focusing on a direct link between marital status and well-being, this study therefore seeks to investigate whether an interaction occurs with specific life events, drawing attention to the importance of the social context.

Prior research concerning stress, buffering effects and vulnerability has drawn attention to the differing levels of resilience to negative events among different social groups (Dohrenwend 1973, Thoits 1982, McLeod and Kessler 1990). Considering the argument that marriage and cohabitation can have benefits for well-being, it seems logical that they could also play a role in increasing resilience and aiding coping when negative life events occur.

One such change in a person's life that is likely to cause stress is the onset of illness and disability. Bury (1982) notes such an event can cause a person to have an experience "where the structures of everyday life and the forms of knowledge which underpin them are disrupted" (p169), and where thoughts of the future may be reevaluated, close personal relationships may be altered, physical capability declines and an individual's sense of mastery and dependency are changed. Illness and functional limitations have been commonly found to be associated with declined psychological well-being (Turner and Noh 1988, Kendig et al 2000, Gaymen et al 2008, Schnittker 2005, Bierman et al 2010, Chen et al 2012) and lower life satisfaction (Palmore and Luikart 1972, Ferrer-i-Carbonell and Van Praag 2002, Strine et al 2008.) Some studies have adopted a longitudinal approach and investigated whether declines in well-being are 'recovered' over time, finding that some degree of adaptation does take place (Powdthavee and Oswald, 2008). Powdthavee (2009) specifically investigated different domains of life satisfaction, finding that disability is particularly related to declines in satisfaction with income, social life, and use of leisure time.

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How may marital status interact with this association between illness and poorer well-being? It has been noted that marriage, and to a debateable extent cohabitation, can provide social and emotional support. Such resources have been previously found to be highly beneficial when stress is encountered (Lin et al 1979, Cohen and Wills 1985, Lepore 1992, Bierman et al 2010) and in the case of illness and disability in particular (Newson and Schultz 1996, Taylor and Lynch 2004).

Some studies have looked specifically at the role of marital relationships as a moderator between illness and well-being. Mancini and Bonnano (2006) found that marital closeness moderated the negative association between functional disability and depression, anxiety and self esteem, drawing attention to how social support and emotional closeness can be so important at such a time. Sherbourne and Hays (1990) found that being married suggested improved mental health amongst the chronically ill, and explained this as being due to increased social support. Rodrigue and Park (1996) investigated marital status and well-being amongst cancer patients, finding that the unmarried reported poorer psychological adjustment than those who were married and that unmarried men in particular report more disruptions at work and within their extended family relationships. Bierman (2012) finds that being married weakens the negative relationship between functional limitations and depression, but only for older men.

However, all of these studies focus on married people only and do not take into account cohabiters. Does being in a cohabiting partnership also aid in the coping and adjustment to an illness or disability, or is the effect only witnessed for married people specifically? How does any protective effect vary between those who are married and those who cohabit? The previously reviewed studies on

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cohabitation and well-being revealed mixed results and arguments concerning the degree of protective effects that this marital status may have in comparison to being married, and therefore it is of interest to investigate the effect of cohabitation at a stressful time when illness occurs, and how this differs to marriage.

Furthermore, only Sherbourne and Hays (1990) and Bierman (2012) investigate men and women separately. It has previously been noted that the consequences of marital status have been proposed to vary by gender, and therefore the role that marital status plays in the relationship between poor health and well-being may do so also. This may particularly be the case when investigating health issues as prior research has additionally shown that when spouses care for each other, wives may be more likely to engage in increased levels of help and be the sole carer whereas husbands may make more use of external sources of help (Stroller and Cutler 1992, Allen 1994). Being married may therefore be particularly beneficial for men when ill health or disability occurs.

There is therefore a need to add to this body of work with more research concerning the moderating role of marital status. Is marital status of importance when poor health occurs, and additionally, does this differ by gender and whether a person is married or cohabiting? These are questions that the current study will investigate.

#### ***1.3.6. Marital status as a moderator: unemployment***

A further life event that is often stressful and disruptive is the loss of one's job. In addition to the loss of income, entering a state of unemployment can have deleterious effects upon an individual's well-being, via the loss of social relationships and self esteem (Winkelmann and Winkelmann, 1998). Jahoda (1982) also notes the potentially damaging effects of the loss of structured

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activity, and sense of identity, whilst Bartley (1994) refers to the loss of physical and mental stimulation and social status. The psychological benefits of work, namely increased optimism and self esteem were also noted by Chapin and Kewman (2001) who studied people who had experienced a spinal cord injury, comparing those who returned to work and those who did not. There are therefore a number of reasons why employment appears beneficial for well-being, and why unemployment may be unfavourable. An unemployed person may encounter a number of social and psychological losses, in addition to those of a financial nature.

Empirical evidence supports an association between unemployment and a range of well-being outcomes. For example, unemployment has been found to be associated with poorer psychological and emotional well-being (Frese and Mohr 1987, Lahelma 1992, Clark and Oswald 1994, Korpi 1997, Montgomery et al 1999, McKee-Ryan et al 2005) lower life satisfaction (Clark et al 2001, Powdthavee, 2012), poorer health (Bartley 1994, 2004) and a higher risk of suicide (Blakely et al 2003, Johannsen and Sindquist 2007).

Winkelmann and Winkelmann (1998) made use of panel data, controlling for unobserved time invariant effects, and find a large, negative effect of unemployment upon life satisfaction, three times the effect size of bad health. Also using panel data, Dooley et al (1994) found that becoming unemployed was associated with twice the risk of depressive symptoms, and additionally found no evidence of a reverse causal pathway (that depression leads to unemployment) and therefore argued against the potential selection hypothesis.

However, whilst a negative association between unemployment and well-being has been well documented, there has been less focus on how marital status may influence the relationship. Whilst not focusing specifically on marriage, Gore



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(1978) found that levels of social support to be an important factor in the adjustment to unemployment. It can therefore be hypothesised that marriage and cohabitation may help reduce the declines on well-being that an unemployed person may experience via social support mechanisms. One study that has investigated the moderating effect of marriage found some mixed results. Artazcoz et al (2004) used cross sectional data from the 1994 Catalan Health Survey to investigate associations between unemployment and well-being, taking into account the roles of gender, family roles and marital status. They found that marriage and cohabitation appeared to have a protective effect upon females, but actually a negative effect upon males. They theorise that this is likely due to more men having the main breadwinner role in the household, and thus experiencing more stress when income is lost. Furthermore, whilst partnerships and having children may benefit women who become unemployed by providing them with alternative sources of status, identity and purpose, men may be less involved in the nurturing, caring aspects of family life, and thus lack this alternative source of meaning and fulfilment. This finding therefore contradicts the view of the protective effects of marriage, and the argument that men in fact benefit more than women.

It has also been noted that unemployment may be related to marital problems and an increased likelihood of partnership dissolution (Jalovaara 2003, Hansen 2005), as the stress of unemployment and associated financial concerns may create tension and dissatisfaction within the partnership. In this view, being in a partnership may not be beneficial as it may become strained and subsequently become a further source of stress for the individual.

Whilst there is therefore a substantial amount of research concerning unemployment and well-being, there is much less concerning how marital status

may influence any associations. Do those in partnerships experience greater or lesser declines in well-being when unemployment occurs, and do these patterns differ by gender? More research could therefore build upon existing findings in a number of ways.

#### ***1.3.7. Non kin forms of social support***

It has been mentioned throughout this review that one of the main mechanisms through which marriage and cohabitation are thought to potentially exert a protective effect when stressful life changes are experienced is via the provision of social and emotional support. However, many studies concerning marital status and well-being do not include alternative, non-kin sources of social support in the analysis. Therefore, it cannot be investigated whether alternative sources of support and personal relationships, such as those with neighbours or friends, influence the relationship between marital status and well-being, or how non kin support compares to marital support.

Ishii-Kintz and Seccombe (1989) note how different sources of personal relationships provide different types of social support. Whilst a spouse or partner tends to provide support of a more intimate, personal nature, a friend may provide support based on a more reciprocal nature and the relationship is based upon common interests and shared experiences. Neighbourly social support is likely to be more instrumental and practical. Non kin support therefore has its specific benefits, as well as potentially contributing to overall senses of integration and belonging.

Non kin forms of support, such as that received from neighbours and friends, have generally been found to be advantageous for well-being (Cantor 1979, Helliwell and Putnam 2004, Bjornskov, 2008, Powdthavee 2008). Baker et al (2005) found that regularly meeting people, talking to others and visiting friends

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were related to improved life satisfaction and less depressive symptoms. Wenger et al (1996) found that differing compositions of social support networks had varying benefits for well-being, in particular combatting feelings of loneliness. She noted that the most successful was the 'locally integrated support network' which consisted of a mix of family, friends and neighbours, whereas the least successful was the 'private restricted network' which was focused on the immediate household only. Such a finding further draws attention to the importance and potential influence of non kin forms of support upon well-being, and the importance of breadth and depth in a person's social connections (Helliwell and Putnam, 2004).

Whilst these studies provide evidence of associations between non-kin support and well-being, they do not investigate whether differences occur for men and women. Kroll (2011) does consider this, finding informal socialising to have a stronger effect upon women's well-being. In contrast, Umberson et al (1996) found little difference in the effect of personal relationships upon well-being, noting they benefit men and women in similar ways. However they group friends and relatives together and therefore the specific effect of kin vs. non kin cannot be ascertained. Turner and Marino (1994) do investigate relationships with a spouse, other relatives, friends and coworkers separately, and still do not find evidence of any gender differences in their effects upon well-being. Gallachio et al (2007) find that whilst men report a higher number of friends and more frequent contact with them, the benefits of friendships to health related quality of life is similar for men and women. In contrast to the previously discussed view that the benefits of marriage may be weighted in favour of men, the bulk of the existing research therefore finds no gender differences in the benefits to well-being of non-kin relationships.

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It has therefore been seen that non kin support tends to be associated with improved well-being, and that it differs to the support received from a partner. There are however a number of under-researched areas concerning non kin support, as noted by Dolan et al (2008), who in their review on a number of factors found to be related to subjective well-being, call for more research on the impact of friends and neighbours upon well-being.

For example, many studies investigating marital status and well-being do not include non-kin relationships as controls, and therefore it cannot be known if these influence findings. For example, is being married still associated with improved well-being if a person socialises frequently with friends, or does this reduce the effect? Furthermore, existing studies have tended to investigate direct effects between informal support and well-being, rather than their moderating effect when stressful life events occur. There are also some mixed findings concerning gender differences in terms of non kin relationships and well-being. Further investigation into these would therefore also help clarify information. For example, it was previously seen that according to findings from Artazcoz et al (2004) marriage and cohabitation does not appear to reduce declines in well-being for men when unemployment occurs, but are men instead aided by frequent interactions with neighbours, or seeing friends and meeting people regularly? By investigating such questions, a more refined and thorough understanding of partnerships and well-being will be gained, and of any gender differences that exist.

#### ***1.3.8. Summary and hypotheses***

Marital status has been proposed to be associated with well-being. Being married, and to a certain extent being in a cohabiting relationship, have been found to be positively related to a range of well-being outcomes. There are

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however some areas that could benefit from being empirically tested such as differences that may occur for men and women, and between married couples and cohabiting couples.

Furthermore, how does marital status interact with stressful life events when they occur? Are the protective effects of partnerships evident across different events and amongst both men and women? There has been less research that has investigated this moderating role of marital status. Focusing on poor health, it has been noted that marriage appears to lessen declines, however there is a lack of information on cohabitation and also differences by gender. In the case of unemployment, there are very few studies concerning the influence of marital status, and a need for further information on cohabitation in particular. There is also a need to take the role of non kin relationships into account.

Based on a review of current findings, the following hypotheses can therefore be made;

- Being married or cohabiting (that is, being in a partnership) will be associated with improved well-being.
- Being married will be more advantageous to well-being than being in a cohabiting relationship
- Men will benefit more from being married and cohabiting than women
- That being in a partnership will have a protective effect when stressful life events occur.
- That being married may have enhanced protective functions over cohabitation when these changes occur.
- Non-kin sources of social support, will also have protective functions when these changes occur.
- That these effects will differ by gender

## 1.4. Methodology

The data set used is the British Household Panel Survey. This is a panel survey which collects information from the same representative sample over time. All adult members of the household are interviewed and data corresponds to a number of social, demographic and attitudinal topics that can be used for a variety of research purposes. It began in 1991 and data has been collected annually since.

All 18 waves of data are used for the purpose of this research. Only members who have been present at all waves are included to prevent bias from missing data. The key items used for the purpose of this analysis are discussed below;

### *1.4.1. Measures of well-being;*

Two measures of well-being are used. The first is the score computed from the General Health Questionnaire (GHQ). This consists of a range of items relating to different areas of well-being; feeling of worry, feelings of usefulness, decision making ability, strain, ability to overcome difficulties, enjoyment, ability to face problems, feelings of unhappiness, confidence, self-worth and general happiness. For each question the respondent is asked how often they have been feeling this way, and the answer is on a 4 point scale. The overall score, ranging from 0-36, can be used as a measure of well-being. As this paper is concerned with general trends in overall well-being rather than actual psychiatric disorders, it has been kept as an interval level variable.

The second measure of well-being used is the respondent's life satisfaction score. It has been argued that asking a respondent how satisfied they are with their life captures the more cognitive and judgemental aspects of well-being (Diener et al,1985). In the BHPS, the respondent can choose from a 7 point scale ranging

from ‘completely dissatisfied’ to ‘completely satisfied’. This measure was also kept as an interval level variable.

#### ***1.4.2. Measure of marital status:***

A range of different categorical measures of marital status were used in the analysis to enable different statuses to be compared. They are as follows:

- Those in partnership (married or cohabiting ) compared to those not in partnership (divorced, widowed, separated, never married)
- Those in partnership (married or cohabiting) compared to the never married
- Those married compared to those cohabiting

#### ***1.4.3. Stressful event variables:***

The event of becoming ill is used. This is based on an item which asks the respondent “Does your health in any way limit your daily activities compared to most people of your age?” This is a categorical variable and a value of 1 signifies that the respondent has reported a state of limiting health whilst the reference category represents those that do not report a state of limiting health. Although the item does take age into account by asking how for the respondent to engage in a comparison process with those of a similar age, it was still decided to restrict the sample to just the under 70 year olds to avoid primarily capturing declines amongst elderly people, when health status changes may be more expected, gradual and coped with in a different way. More accurate data could be obtained from future study which investigates this age group separately.

A variable capturing the event of becoming unemployed was also created, comparing those who were in employment to those categorised as unemployed. Employment was defined as being either employed or self-employed, and

working more than 20 hours a week. This measure therefore captures the change from a state of part or full time employment, to unemployment. Other responses to the employment status question, such as retired, family care or student were coded as missing.

A number of other covariates were included as controls in the models, as it was thought these could potentially influence relationships and therefore it was desired to hold their effect at zero. These were; *age*, as effects could differ according to the age of a person, for example marriage may have more of a protective effect as a person gets older, as a person becomes more likely to experience bad health or social circles become smaller. Although the sample was restricted to those aged under 70, it was still thought necessary to control for this. *Household income*, as it may be the case that, for example, those with higher incomes have less need for a partner due to being able to afford alternative sources of well-being. The measure of income was equivalised household income. *Household size*, as if there are many people living in the house, the effect of marriage may differ than if the couple live on their own. *Parental status*, measured via an item which asked if there were any children living in a person's household - as it is likely that the effects of a partnership change when children are in the household. *Education status* – measured via items which ask if a person has a degree or not was also included, and finally some variables relating to *non-kin support*. If it is to be assumed that one of the main protective effects of partnerships are the social support functions they perform, then it may be the case that the positive effect is higher if there are few other sources of social support, and lower if there are many. The inclusion of these therefore allows for some initial comparisons between kin and non kin support, and also whether the effects of these differ by gender. Items which



asked how often a person meets other people, and how often they speak to their neighbours, were included as measures of this.

#### *1.4.4. Analytical Methods*

All 18 waves of the BHPS are used. The decision was taken to use a balanced panel for the analysis – that is, only respondents who were present at every wave. This has some advantages, but some disadvantages also. The main disadvantage is that it reduces the number of observations. However it also reduces the error and bias that may be introduced when respondents who have missed many waves are included. There could, for example, be a number of unmeasured changes that have occurred in the time absent from the sample. Furthermore, the missing data may not have randomly occurred, and thus introduce a source of bias and unobserved characteristics into the analysis. As the attrition rate was considerable, and balanced panel observations still constituted a high number, it was decided to use this balanced panel for analysis. Descriptive statistics were obtained by comparing mean scores across key groups, and also the use of transition matrixes was employed to identify movements into and out of particular states (i.e. limiting health, and unemployment)

Fixed effect regression models are used. These models measure change at the individual level, and control for time invariant unobserved characteristics. This is particularly useful for this study for a number of reasons. Firstly, investigating effects upon well-being is confounded by the possibility of personality being closely linked to how a person copes with life events and evaluates their well-being. Assuming personality to be mostly stable and fixed

over time in adulthood (Huesmann et al 1984, Conley 1985, Small et al 2003), personality characteristics can be controlled for in fixed effects models.

It may also be the case that certain personality types have greater or lesser chances of becoming married (McCrainie and Kahan 1986, Johnson et al 2004, Whisman et al 2007). For example, if married people are found to be happier, this may be accountable to those people being of happier dispositions prior to marriage. Controlling for personality traits therefore helps to reduce this potential selection bias.

Fixed effects models are also well suited to this study as by measuring change at the individual level, they are useful for capturing when an individual experiences a transition. With the example of the life event variables, rather than comparing the employed group to the unemployed group, or those with limiting health to those without, the model coefficients represent the effect of an individual transitioning from a state of employment to unemployment, or from no limiting health to limiting health, which is most relevant for this research. The number of observations for the regression models does differ as different comparison groups are used across different models, which have varying frequencies of observations. The number of observations also differ in the regression models as compared to the descriptive statistics. This is due to item missingness within the variables included in the models. When this occurs, observations are lost from the models. There is therefore a trade off between controlling for another factor in the models, yet losing some observations. When constructing the models, if a variable removed too many observations (i.e. lots of missing data due to non-response, or a variable only occurring at a few waves) it was removed from the model.

The regression models additionally contain interaction terms to test for whether the effect of the stressful life event variable upon wellbeing significantly differs according to marital status. The decision could have been made to run separate regressions for the groups of interest (i.e. one model for those in a partnership, and one for those not in a partnership). However whilst this would allow the coefficients to be compared across the two groups, it could not tell us if the differences in effect size were statistically significant. By testing this instead using interaction terms, results additionally provide a p value, allowing findings to be drawn as to whether any difference found in effect size between the two groups could have occurred by chance, or is conversely statistically significant.

## 1.5. Results

### *1.5.1. Descriptive information on well-being by marital status*

TABLE 1-1 MEAN WELL-BEING SCORES BY MARITAL STATUS

Marital status		Mean GHQ score	Mean life satisfaction score
Married	(n=120,339)	24.9	5.35
Living as couple	(n=23,479)	24.9	5.32
Widowed	(n=17,277)	24.0	5.01
Divorced	(n=11,835)	23.4	4.68
Separated	(n=3,836)	22.2	4.47
Never married	(n=47,229)	25.3	5.10

When comparing mean GHQ scores by marital status, it can be seen that those who are classified as never married report the highest scores. This may reflect the younger age of many individuals likely to not be married yet, and subsequently the likelihood of less responsibilities and better health. The average age of the never married is 28, compared to the average age of married respondents being 49. By controlling for potentially confounding variables in the subsequent regression analysis more can be inferred about these findings.

The next set of highest scores are reported by those either married or cohabiting, who have the same mean score of 24.9. Those marital statuses which are

associated with the lowest mean scores are the widowed and divorced, and those classed as separated have the lowest score of all. This may reflect the more recent nature of a separation as opposed to a divorce.

Results differ slightly when investigating mean life satisfaction scores. The highest mean score is associated with the married, closely followed by those cohabiting. The never married have the third highest mean score. The lowest scores again belong to those who have had partnerships cease, the widowed, divorced and separated.

TABLE 1-2 MEAN WELL-BEING SCORES BY MARITAL STATUS, MEN AND WOMEN SEPARATELY

Marital status	Mean GHQ score (men)	Mean GHQ score (women)	Mean life satisfaction score (men)	Mean life satisfaction score (women)
Married	25.53	24.32	5.32	5.37
Cohabiting	25.77	24.34	5.42	5.28
Widowed	24.92	23.73	5.20	5.20
Divorced	24.61	22.88	4.75	4.64
Separated	22.98	21.92	4.48	4.45
Never married	26.09	24.65	5.11	5.08

When comparing mean GHQ scores between men and women, it can be seen that men have higher mean scores overall, although differences in mean scores between men and women were not statistically significant.

Amongst men, those who cohabit report slightly higher scores than those who are married. Amongst both men and women, the never married report the highest scores of all the statuses, whilst the separated have the lowest.

When comparing mean life satisfaction scores amongst men and women, the results are more mixed. Married women report higher scores than married men, whilst the scores for widowed men and women are the same. In all other categories, men report higher scores, but they are fairly close, with the exception of cohabiting men who have noticeably higher scores than cohabiting women.

It can also be noted that amongst men, those who cohabit have the highest scores of all, even higher than those who are married. Whereas amongst women, the

highest mean scores belong to those who are married. Bearing similarity to mean GHQ scores, the lowest are associated with the separated category.

### *1.5.2. Marital status and the event of becoming ill*

#### *Descriptive information:*

TABLE 1-3 HEALTH STATUS TRANSITIONS

	Total number of observations	Transition out of this state	Remain in this state
Health not limiting	113, 512 (100%)	5.17%	94.83%
Health limiting	16, 873 (100%)	31.72%	68.28%

Table 1-3 shows a transition matrix, enabling an appreciation of transitions into and out of the state of limited health. There is a higher number of observations of non-limiting health than of limiting health. Just over 5% transition into a state of limiting health throughout the course of the observation period. Approximately 68% of those in a state of limiting health remain in that state, with the remaining 32% transitioning into a state of not limiting health.

TABLE 1-4 WELL-BEING SCORES BY MARITAL AND HEALTH STATUS

	GHQ Scores	Life satisfaction scores
Health is limiting	21.4	4.47
Health is not limiting	25.4	5.36
Health is limiting, in partnership	21.5	4.61
Health is limiting, not in partnership	21.1	4.13
Health is limiting, married	21.6	4.66
Health is limiting, cohabiting	21.4	4.53

Table 1-4 displays a number of mean scores, firstly comparing those of differing health status, and then additionally by marital status. It can be seen that those who do not report a limited state of health have a higher mean GHQ and life satisfaction score than those who do report a state of limited health, and this difference was also statistically significant.

Amongst those who do report a state of limiting health, those in a partnership (married or cohabiting) have higher mean scores than those not in a partnership (divorced, separated, widowed or never married). Comparing between those who

are married and those who cohabit, the married have slightly higher mean scores for both well-being measures, although differences were not significant

TABLE 1-5 ASSOCIATIONS BETWEEN WELL-BEING MEASURES AND PARTNERSHIP AND HEALTH STATUS, BY GENDER

	GHQ Score			Life satisfaction score		
	Pooled sample	Men	Women	Pooled sample	Men	Women
In partnership	.583 ***	.703 ***	.518 ***	.238 ***	.264 ***	.220 ***
Limiting health	-2.67 ***	-2.47 ***	-2.77 ***	-.516 ***	-.538 ***	-.490 ***
Age	-.227**	-.288 **	-.186 ***	-.021 **	-.026 ***	-.017 ***
Age squared	.002 **	.003 ***	.002 ***	.000	.000 ***	-.005
Household income	.041 *	.098 *	.164	.052	.094	.088
Household size	.000	.003	.002	.004	.002	.006
Parent	-.241 *	-.088	-.353	-.067 *	-.062	.067
Employed	.711 ***	.874***	.610 ***	.030 ***	.073 **	.006
Has degree	.054	.009	.106	.012	.005	.019
Talks to neighbours often	.170 ***	.117 **	.210 **	.035 ***	.038 **	.033 **
Meets people often	.142 **	.079 *	.203 **	.042 **	.039 **	.044 **
Limiting health*in partnership	.636 ***	.532 **	.683 **	.175 ***	.205 ***	.163 *
R squared	0.07	0.08	0.07	0.06	0.05	0.06
N	52454	24051	28403	46492	21319	25173

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.10

Table 1-5 shows the results of fixed effects regression models, investigating the effect of a change in health status upon GHQ scores and life satisfaction scores. They also contain an interaction term to test whether this effect significantly differs for those who are in a partnership (married or cohabiting) compared to those who are categorised as not being in a partnership (divorced, widowed, separated or never married). Results are presented for the pooled sample of both men and women, and also for men and women separately, for each dependent variable.

The first model investigates associations with GHQ scores. Becoming part of a partnership is associated with a positive effect upon well-being. The positive effect is larger for men ( $b=0.703$ ,  $p=0.000$ ) than for women ( $b=.518$ ,  $p=0.000$ ), and this difference is also statistically significant ( $p=0.011$ ) therefore lends support to the argument that men benefit emotionally from marriage more so than women.

In column 1 it can be seen that a change into a state of limiting health is associated with a significant decline in GHQ scores ( $b=-2.67$ ,  $p=0.000$ ). This is the effect size when other variables are held constant at zero, and therefore provides the effect size for those not in a partnership (this is coded at zero). When this is compared between men and women, it is shown that there is a larger associated decline for women ( $b=-2.77$ ,  $p=0.000$ ) than for men ( $b=-2.47$ ,  $p=0.000$ ) although this difference is not statistically significant.

The interaction terms are significant, indicating that the decline in well-being when a state of limited health occurs significantly varies between those who are in a partnership and those who are not. The positive sign of the term denotes that those who are in a partnership fare better. For men the interaction term has a coefficient of  $b=0.532$  ( $p=0.021$ ). The full effect for men in a partnership who have a change in health status is therefore  $-2.47 + 0.532 = -1.93$ , compared



to -2.47 for those not in a partnership. For women, the full effect for those in a partnership who have a change in health status is  $-2.77 + 0.683 = -2.08$ . This is therefore smaller than those women who are not in a partnership, but slightly larger than the effect for men who are in a partnership.

With life satisfaction as the outcome variable, results are similar. It can again be seen that the change into a partnership is positively associated for both men and women, with a larger effect for men ( $b=0.264$ ,  $p=0.000$ ) than women ( $b=0.220$ ,  $p=0.000$ ). Entering a state of limiting health is negatively related to life satisfaction score, for both men ( $b=-0.538$ ,  $p=0.000$ ) and for women ( $b=-0.490$ ,  $p=0.000$ ).

The interaction terms are positive and significant in all models when investigating life satisfaction. Declines in life satisfaction that are associated with a change into a state of limiting health therefore vary by partnership status, with those in partnerships experiencing a lesser decline. However this effect is more significant for men, and only mildly significant for women. Men who are in a partnership therefore experience a decline of  $-0.538 + 0.205 = -0.333$ , whilst those not in a partnership experience a decline of  $-0.538$ . Women who are in a partnership experience a decline of  $-0.490 + 0.163 = -0.327$ , compared to  $-0.490$  for those not in a partnership.

*Compare against the never married:*

TABLE 1-6 ASSOCIATIONS BETWEEN WELL-BEING MEASURES AND PARTNERSHIP AND HEALTH STATUS, CONTROL GROUP OF NEVER MARRIED

	GHQ scores			Life satisfaction		
	Pooled sample	Men	Women	Pooled sample	Men	Women
In partnership (0=never married)	.214 *	.269 *	.147 *	.175 ***	.189 ***	.160 ***
Limiting health	-2.60 ***	-2.59 ***	-2.60 ***	-.542 ***	-.625 ***	-.474 ***
Age	-.195 **	-.257 ***	-.151 ***	-.044 ***	-.084 ***	-.008
Age squared	.002 ***	.002 ***	.001 ***	-.000 *	.000 ***	-.000
Household income	.087	.067	.103	.180	.152	.123
Household size	.000	.006	-.008	.001	-.001	.004
Parent	.033	.074	.075	-.046	-.040	-.056
Employed	.531 ***	.875 ***	.485 ***	.026 **	.097 **	.014
Has degree	.150	.152	.144	.023	.047	.004
Talks to neighbours often	.147 **	.098 *	.180 **	.035 ***	.040 **	.030 **
Meets people often	.105 **	.121 **	.152 **	.036 **	.041 **	.032 **
Limiting health*in partnership	.535	.674 **	.446	.222 ***	.302 ***	.157 **
N	47025	22408	15303	41660	19849	21811
R	0.06	0.05	0.07	0.07	0.07	0.06

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.10

Table 1-6 features the measure of marital status that compares those in a partnership to those who are categorised as never married. Those who have never married may differ significantly to those who have 'lost' a partnership, eg. the divorced, widowed and separated. The previous results indicating the enhanced well-being of those in a partnership may therefore be capturing the negative experience of loss and distress amongst those who have had a relationship end. Comparing solely against the never married removes this problem.

The first 3 columns show the results when GHQ score was the outcome variable. Becoming part of a partnership is associated with an increase in GHQ scores in all models, with a larger effect for men ( $b=0.257$ ,  $b=0.087$ ) than for women ( $b=0.147$ ,  $p=0.092$ ). This difference was also statistically significant.

The coefficients are smaller than in the previous models which featured all non partnership statuses (never married, widowed, divorced, separated) as the reference category, and are also only mildly significant. This suggests that whilst being in a partnership is still preferable, the extent of benefit is less than when comparing only against those who have never married. This indicates the importance of including a range of reference categories when investigating marital status.

Entering a state of limiting health is significant and negative in all models, with almost the same size effect for men ( $b=-2.59$ ,  $p=0.000$ ) and for women ( $b=-2.60$ ,  $p=0.000$ ). This represents the effect for those who are never married (the reference category). The interaction term is positive in the men's model ( $b=0.674$ ,  $p=0.012$ ). This denotes that the decline in GHQ scores that is associated with entering a state of limiting health differs between men who are in a partnership and men who are never married. The positive sign of the

interaction term signifies that those men who are in a partnership have a reduced negative effect. Their full effect is equivalent to  $-2.69 + 0.674 = -2.01$ , compared to  $-2.69$  for those who are never married.

When investigating life satisfaction scores, it can once again be seen that being in a partnership is associated with higher scores, in this case slightly larger for men ( $b=0.189$ ,  $p=0.000$ ) than for women ( $b=0.160$ ,  $p=0.000$ ) but this difference is not statistically significant in this model. These coefficients are however more significant than when GHQ scores were the outcome variable. Entering a state of limiting health is negatively associated with life satisfaction. The coefficient captures the effect of those who are never married, and is larger for men ( $b=-0.625$ ,  $p=0.000$ ) than for women ( $b=-0.495$ ,  $p=0.000$ ), and this difference is significant.

With life satisfaction as the outcome variable, the interaction terms are positive for both men and women. This indicates that the decline in life satisfaction associated with entering a state of limiting health significantly differs between those who are in a partnership and those who are never married. The positive sign of the interaction term denotes that the negative effect is reduced for those in a partnership. For men, the full effect for those in a partnership is  $-0.625 + 0.302 = -0.323$ . This is compared to the effect for those who are never married of  $-0.625$ . For women, the full effect for those in a partnership is  $0.474 + 0.157 = 0.631$ . This is compared to the effect for those who are never married of  $-0.474$ . Furthermore, once the full effects for both men and women in partnerships have been computed, it can be seen that the associated declines in life satisfaction scores are very similar in size.

*Comparison of married to cohabiting*

TABLE 1-7 ASSOCIATIONS BETWEEN WELL-BEING MEASURES AND PARTNERSHIP AND HEALTH STATUS, BY GENDER, COMPARING MARRIED TO COHABITING

	GHQ Score			Life satisfaction score		
	Pooled sample	Men	Women	Pooled sample	Men	Women
Limiting health	-2.56 ***	-2.13 ***	-2.91 ***	-.342 ***	-.250 **	-.438 **
Married (0=cohabiting)	.207	.231	.189	.194	.183	.215
Age	-.028 *	-.041 **	-.015	-.019 **	-.044 **	.007
Age squared	.000	.000	.000	-.001	.000	-.000
Household income	.009 *	.026 *	-.000	.099	.101	.004
Household size	.016	.000	-.029	.004	-.007	.005
Parent	.005	.009	-.097	-.036	-.014	-.058
Employed	.489***	.700 **	.398 **	.122 ***	.159 ***	.114 ***
Has degree	.319	.456	.223	.084	.181 **	.003
Talks to neighbours often	.143 **	.052 **	.218 **	.047 ***	.041 **	.045 **
Meets people often	.106 **	.100 *	.114 *	.025 **	.029 **	.022 **
Limiting health*married	.715	.387	.183	.038	.066	.124
R squared	0.06	0.06	0.07	0.07	0.06	0.07
N	35117	16523	18864	31079	14379	16700

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.1

Table 1-7 features the measure of partnership that compares those married against those cohabiting, in order to compare the effects of the two differing forms of partnership. The reference group is cohabitees. The main effect of limiting health upon GHQ scores, which represents the effect for cohabitees (coded as zero) is negative in all three models, although a significantly larger effect is witnessed for women ( $b=-2.91$ ,  $p=0.000$ ) than for men ( $-2.13$ ,  $p=0.000$ )

There is no significant association with GHQ of being married as opposed to cohabiting. The fixed effects regression measure change at the individual level, and therefore this variable more accurately identifies the effect of changing from a state of cohabiting to married. The lack of significance suggests no noteworthy difference in the psychological and emotional benefits of marriage as compared to cohabitation, and therefore does not support the argument that marriage has enhanced advantages for well-being. The interaction terms is also not significant, therefore declines that are associated with a negative change in health status do not significantly vary between those who are married and those who cohabit.

With life satisfaction as the dependent variable, the effect of poor health is negative, and again a significantly larger effect is witnessed for women ( $b=-0.438$ ,  $p=0.023$ ) than for men ( $b=-0.250$ ,  $p=0.025$ ). As was the case with GHQ scores, there is no significant effect of a change from cohabiting to marriage. The interaction terms are not significant. This again does not support the argument that marriage has enhanced protective benefits over cohabitation. Whilst the previous models which grouped marriage and cohabitation together showed there was a protective effect compared to those not in a partnership, there is no evidence of the married faring better than those who cohabit. It therefore

appears that protective effects stem from being in a partnership, whether married or cohabiting.

TABLE 1-8 ASSOCIATIONS BETWEEN WELL-BEING AND HEALTH, INTERACTIONS WITH NON-KIN MEASURES OF SUPPORT

	GHQ Score			Life satisfaction		
	Pooled sample	Men	Women	Pooled sample	Men	Women
Limiting health	-1.88 ***	-2.08 ***	-1.73 ***	-.333 ***	-.290 **	-.308***
Age	-.230 **	-.290 ***	-.189 ***	-.056 ***	-.081 ***	-.038 ***
Age squared	-.002 ***	.003 ***	.002 ***	.000**	.000**	.000**
Household income	-.045	.030	.060	.014	.039	.006
Household size	-.001	.004	-.007	.004	.001	.007
Parent	-.112	-.028	-.343	-.056	-.047	-.066
In partnership	.778 ***	.758 ***	.606 ***	.259 ***	.287 ***	.242 ***
Employed	.612 ***	.874 ***	.421 **	.082 **	.113	.059 **
Has degree	.118	.130	.113	.018	.051	.005
Talks to neighbours often	.101 **	.062 **	.153 **	.032 **	.031 **	.032 **
Meets people often	.154 ***	.131 **	.170 **	.038 *	.038 **	.039 **
Limiting health*neighbours	.236**	.330 **	.170	.036 *	.080**	.011
Limiting health*meet	.049	.295	.133	.020	.017	.012
R squared	0.09	0.10	0.08	0.10	0.11	0.08
N	52454	24051	28403	56492	21139	25173

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0

Limiting health was also interacted with the non kin measures of social support as depicted in Table 1-8. The measure of marital status that compares those in a partnership to all those not in a partnership was used.

With GHQ scores as the outcome, the main effect of limiting health status is negative and significant in all models. The non kin measures of support are frequency of talking to neighbours and frequency of meeting people. These are significantly and positively related to GHQ scores, supporting the view of non kin support being beneficial for well-being. Larger effects are witnessed for women, suggesting they benefit even more so than men.

The interaction terms test for whether the effect of entering a state of limiting health significantly differs between those who have higher non kin support or lower non kin support. There is no significant interaction when the measure of support concerning frequency of meeting people is used, suggesting that the frequency of meeting people is not associated with either a larger or smaller decline in well-being when a person experiences limiting health. However, for

men, the interaction term using the frequency of talking to neighbours is significant, and positive. This suggests that the decline in well-being that is associated with limiting health significantly varies between those who have a higher frequency of talking to their neighbours, and those that have a lower frequency, with those that have a higher frequency experiencing a reduced decline. Whilst the effect for those who have a low frequency was -2.08, for those who have a higher frequency it is  $-2.08 + 0.330 = -1.75$ . Frequent interactions with neighbours therefore appear to be a protective resource when this stressful life change is encountered, but for men only.

With life satisfaction as the dependent variable, a similar set of findings are obtained. Entering a state of limiting health is negatively related to life satisfaction. Speaking to neighbours frequently and meeting people frequently are positively related. The interaction terms reveal a positive interaction of limiting health and talking to neighbours, for men only. Whilst men who talk to their neighbours infrequently have a decline in life satisfaction of -0.290, those who talk to their neighbours frequently have a decline of  $-0.290 + 0.080 = -0.210$ .

### *1.5.3. Marital status and the event of becoming unemployed*

#### *Descriptive information:*

TABLE 1-9 EMPLOYMENT TRANSITIONS			
	Total number of observations	% who transition out of this state	% who remain in this state
Employed	104,798 (100%)	2.14%	97.86%
Unemployed	5,292 (100%)	48.70%	51.30%

Table 1-9 displays a transition matrix, showing information pertaining to transitions into and out of unemployment throughout the observation period. Just over 2% of employed observations change to unemployed. Of those unemployed roughly half transition back into employment, whilst the others remain in this state.



The mean age of those who are unemployed is 34, and 63% of unemployment observations are from men, and 37% from women.

TABLE 1-10 MEAN WELL-BEING BY EMPLOYMENT STATUS AND MARITAL STATUS

	GHQ Scores	Life satisfaction scores
Unemployed	23.3	4.61
Employed	25.3	5.25
Unemployed, in partnership	23.2	4.75
Unemployed, not in partnership	23.4	4.50
Unemployed, married	23.2	4.80
Unemployed, cohabiting	23.1	4.69

Table 1-10 displays a table of well-being means, relating to employment status and marital status. Focusing on GHQ scores, the unemployed have a mean score that is 2 points lower than the employed, 23.3 as compared to 25.3. When comparing amongst the unemployed, those in a partnership have a slightly lower mean GHQ score than those not in a partnership. The difference is only slight, 23.4 compared to 23.2, but points against the protective effects of being in a partnership in the case of unemployment. Amongst those who are married or cohabiting, the results are again very similar, with the married having a very slightly higher score of 23.2 compared to 23.1 for cohabitees.

The results differ slightly when studying mean life satisfactions scores. The unemployed do again have a lower score than the employed, 4.61 compared to 5.24. When comparing amongst those who are in a partnership and those who are not, those who are in a partnership have a score of 4.75, which is higher than those who are not in a partnership, who have a score of 4.5. With this well-being outcome therefore, the protective effects of being in a partnership are suggested. The mean score is higher for those who are unemployed and married (4.80) than for those who are unemployed and cohabiting (4.69), again bearing difference to the results found for GHQ scores, in which they were very similar. Where life satisfaction is concerned, it would therefore appear that marriage is associated with enhanced well-being over cohabitation

## Regression results:

TABLE 1-11 ASSOCIATIONS BETWEEN WELL-BEING MEASURES AND PARTNERSHIP AND EMPLOYMENT STATUS, BY GENDER

	GHQ Score			Life satisfaction score		
	Pooled sample	Men	Women	Pooled sample	Men	Women
In partnership	.456 ***	.683 ***	.530 ***	.203 ***	.274 ***	.163 ***
Unemployed	-2.09 ***	-2.18 ***	-2.00 ***	-.401 ***	-.446 **	-.386 ***
Age	-.047 **	-.030 **	-.069	-.024 ***	-.031 ***	-.014 **
Age squared	.002	.004 ***	.001	.000 ***	.001 ***	.000
Household income	-.000	-.003	-.000	.091 *	.098 *	.083
Household size	-.023	-.021	-.004	-.001	-.033	-.006
Parent	-.190	-.399	.007	-.040	-.026	-.065
Limiting health	-2.15 ***	-2.37 ***	-.186 ***	-.433 ***	-.373 ***	-.467 ***
Has degree	.259	.208	.301	.090	.128	.050
Talks to neighbours often	.103 **	-.150 **	.059	.034 **	.025 **	.043 **
Meets people often	.096 *	.110	.088	.036 **	.049 **	.021
Unemployed*in partnership	.037	.421	.641	.147 *	.056	.154 **
R squared	0.08	0.07	0.09	0.08	0.06	0.09
N	36703	18721	17982	32504	16561	15943

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.10

This model features the variable capturing the change from employment to unemployment. The marital status measure compares those who are in a partnership (married or cohabiting) to those not in a partnership (divorced, widowed, separated, never married).

With GHQ scores, being in a partnership is associated with an improvement in GHQ scores, indicating the benefits of partnerships for well-being. The effect is larger for men ( $b=0.683$ ,  $p=0.000$ ) than for women ( $b=0.530$ ,  $p=0.000$ ) and this difference is significant. In all three models, becoming unemployed is associated with a significant decline in GHQ scores, of approximately 2 points. The effect is slightly larger for men ( $b=-2.18$ ,  $p=0.000$ ) than for women ( $b=-2.00$ ,  $p=0.000$ ), but this difference is not significant. The interaction terms are not significant. The decline in GHQ scores that is associated with becoming unemployed does not therefore significantly vary between those in a partnership and those not in a partnership. This is the case for both men and women.

With life satisfaction as the outcome variable, a slightly different set of findings are obtained, suggesting that the different outcome variables used capture different aspects of a person's well-being levels. Being in a partnership is once again associated with improved life satisfaction scores, with a significantly larger size effect for men ( $b=0.274$ ,  $p=0.000$ ) than for women ( $b=0.163$ ,  $p=0.000$ ). Becoming unemployed is significantly associated with a decrease in life satisfaction scores for both men and women, although with a larger decrease for men ( $b=-0.446$ ,  $p=0.000$ ) than for women ( $b=-0.386$ ,  $p=0.000$ ).

The interaction term is not significant in the men's model. Therefore the decline in life satisfaction associated with becoming unemployed does not significantly differ between those men who are in a partnership and those who are not. However, there is a significant interaction for women ( $b=0.154$ ,  $p=0.042$ ).

Therefore, whilst the ‘main effect’ for women of unemployment upon life satisfaction – which more accurately can be interpreted as the effect for those not in a partnership - is -0.386, the effect for those in a partnership is -  $0.386 + 0.154 = -0.232$ .

The significant and positive interaction coefficient therefore suggests that when unemployment occurs, those women in a partnership have a smaller decline in life satisfaction scores. Being in a partnership therefore appears to be protective in the face of unemployment, but for women’s life satisfaction scores only.

TABLE 1-12 ASSOCIATIONS BETWEEN WELL-BEING MEASURES AND PARTNERSHIP AND EMPLOYMENT STATUS, CONTROL GROUP OF NEVER MARRIED

	GHQ scores			Life satisfaction		
	Pooled sample	Men	Women	Pooled sample	Men	Women
In partnership (0=never married)	.117 **	.141 **	.073 *	.166 ***	.174 **	.172 **
Unemployed	-2.04 ***	-2.07 ***	-1.95 ***	-.347 ***	-.372 ***	-.362 ***
Age	-.249 ***	-.377 ***	-.104	-.043 ***	-.054 ***	-.037 **
Age squared	.002 **	.003 ***	.000	.000 ***	.001 ***	.000
Household income	.039	.047	.037	.191	.220	.142
Household size	-.028	-.002	-.057	-.008	-.007	-.008
Parent	.016	.256	-.251	-.015	.026	-.059
Limiting health	-2.20 ***	-1.93 ***	-2.41 ***	-.447 ***	-.371 ***	-.513 ***
Has degree	.415 **	.450 *	.381	.127 **	.162	.088
Talks to neighbours often	.066	.055	.082	.035 **	.030 ***	.040 **
Meets people often	.070	.100	.032	.028 **	.046 **	.005
Limiting health*in partnership	.128	.547	.782	.141	.108	.121 **
N	33383	17546	15837	29952	15515	14037
R squared	0.07	0.06	0.07	0.07	0.06	0.08

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.10

Table 1-12 features the measure of marital status that compares those in a partnership to those who are never married. Being in a partnership was associated with improved GHQ scores. However, as was seen when focusing on the event of entering a state of limiting health, coefficients were smaller than when the reference category was all those who were not in a partnership. Furthermore, the effect was only significant at the 10% level for women ( $b=0.073$ ,  $p=0.083$ ).

Entering the state of unemployment was negatively related to GHQ scores for men ( $b=-2.07$ ,  $p=0.000$ ) and for women ( $b=-1.95$ ,  $p=0.000$ ). No interaction terms were significant, indicating that the decline in GHQ scores associated with becoming unemployed does not differ between those who are in a partnership and those who are never married.

With life satisfaction as the dependent variable, there is a positive effect of becoming part of a partnership, and it is of a very similar size for men ( $b=0.174$ ,  $p=0.019$ ) and for women ( $b=0.172$ ,  $p=0.011$ ). Becoming unemployed is negatively related to life satisfaction scores. The non-interacted term, which represents the effect for those never married, is of a similar size for men and women, although slightly larger for men ( $b=-0.372$ ,  $p=-.000$ ) than for women ( $b=-0.362$ ,  $p=0.000$ ).

The interaction term is positive and significant in the women's model. This reveals that the effect of unemployment upon life satisfaction scores is significantly different for those women who are in a partnership, and those who never married. The full effect for women in a partnership is  $=0.362 + 0.121 = -0.241$ , compared to  $-0.362$  for women who are never married.

TABLE 1-13 ASSOCIATIONS BETWEEN WELL-BEING MEASURES AND PARTNERSHIP AND EMPLOYMENT STATUS, CONTROL GROUP OF COHABITING

	GHQ Score			Life satisfaction score		
	Pooled sample	Men	Women	Pooled sample	Men	Women
Married (0=cohabiting)	.277	.224	.294	.172	.139	.216
Unemployed	-2.01 ***	-2.55 ***	-1.87 ***	-.265 **	-.366 **	-.234 **
Age	-.045**	-.026 **	-.065	-.024 ***	-.027 ***	-.021 **
Age squared	.002	.002 **	.001	.001 ***	.001 ***	.000
Household income	.023	.027	.021	.047	.067	.031
Household size	-.034	-.043	-.025	-.009	-.013	-.006
Parent	-.0134	-.098	-.149	-.054	-.63	-.049
Limiting health	-2.37 ***	-2.12 ***	-2.55 ***	-.467 ***	-.393 ***	-.503 ***
Has degree	.244	.267	.230	.117	.160	.103
Talks to neighbours often	.065 *	.071 **	.058 *	.029 **	.028 **	.033 *
Meets people often	.032	.028	.037	.025 **	.030 **	.022
Unemployed*married	.258	.111	.530	.136	.174	.124
R squared	0.08	0.07	0.08	0.09	0.09	0.08
N	25640	13266	12374	22685	11720	10965

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.10

Table 1-13 features the measure of marital status that compares married people against cohabiters. The first columns feature the result when GHQ scores are the outcome variable. There is no significant effect upon GHQ scores of changing from a state of cohabitation to marriage, suggesting that marriage is not particularly advantageous to well-being, when compared to cohabiting relationships. Becoming unemployed is still significantly associated with lower GHQ scores for men ( $b=-2.55$ ,  $p=0.012$ ) and for women ( $b=-0.187$ ,  $p=0.022$ ), with the effect for men being significantly larger. The interaction term is not significant, suggesting this decline does not significantly vary between those who are married or those who cohabit.

A very similar set of findings are obtained when investigating life satisfaction. Becoming married is not significant in any model. Unemployment is negatively associated with life satisfaction. The interaction terms are not significant, suggesting this decline does not significantly differ between the married and cohabiting.





TABLE 1-14 ASSOCIATIONS BETWEEN EMPLOYMENT STATUS AND WELL-BEING, INTERACTED WITH NON KIN SUPPORT

	GHQ Score			Life satisfaction		
	Pooled sample	Men	Women	Pooled sample	Men	Women
Unemployed	-1.95 * **	-2.02 ***	-1.80 **	-.466 **	-.601 **	-.406 **
Age	-.018 ***	.023 ***	.012 ***	-.009 **	-.012 **	-.007 **
Age squared	-.042	.025	.055	.001	.002	.001
Household income	-.001	.009	-.005	.024	.029	.026
Household size	-.101	-.037	-.213	.004	.001	.007
Parent	.129 ***	.109 ***	.201 ***	.017	.019	.016
In partnership	.674***	.874 ***	.461 **	.229 ***	.259 ***	.218***
Limiting health	-1.89	-.230	-1.63	-.303 ***	-.297 ***	-.308 ***
Has degree	-.002	.003	.002	.008	.021	.002
Talks to neighbours often	.121 ***	.078 **	.166 **	.030 **	.034 **	.028 **
Meets people often	.071 *	.016*	.135*	.026 *	.038 **	.020 **
Unemployed*meets	.245	.226	.072	.016	.021	.011
Unemployed*neighbours	.051	.080 *	.161	.020	.044 **	.012
R squared	0.10	0.10	0.09	0.11	0.11	0.08
N	36703	18721	17982	32504	16561	15943

\*\*\*= sig at 0.000, \*\*=sig at 0.05, \*=sig at 0.10

Table 1-14 shows the regression model results when the unemployment variable was interacted with the non-kin measures of social support: frequency of talking to neighbours and frequency of meeting people.

Unemployment is negatively related to GHQ scores for men ( $b=-2.02$ ,  $p=0.000$ ) and for women ( $b=-1.80$ ,  $p=0.022$ ). Of the non-kin measures, frequency of talking to neighbours is positively related to GHQ scores.

The interaction terms reveal a positive interaction between becoming unemployed and the frequency of talking to neighbours, for men ( $b=0.080$ ,  $p=0.061$ ), which is mildly significant. The interaction term is positive, denoting that the decline in GHQ scores associated with becoming unemployed is lessened for those men who talk to their neighbours more frequently. The effect for this group is therefore  $-2.02+0.080=-1.94$ .

In terms of life satisfaction, unemployment was again negatively related, whilst both measures of non-kin support were positively related, for both men and women. The interaction terms show a positive association of talking to neighbours and unemployment, for men only ( $b=0.044$ ,  $p=0.049$ ). As was the case with GHQ scores, the decline in life satisfaction associated with unemployment is lessened for those who have frequent interactions with neighbours. The full effect for men is therefore  $-0.601+0.044=-0.557$ .

## **1.6. Discussion**

The study aimed to investigate associations with marital status and well-being, and in particular the moderating role of marital status when stressful life events occur. Differences between men and women and between various types of marital status were investigated.

### ***1.6.1. Marital status and well-being:***

It was found that being in a partnership – that is being married or cohabiting as opposed to being never married, divorced, separated or widowed were advantageous for life satisfaction and GHQ scores. This is in line with previous research which has suggested the beneficial effects of close partnerships upon mental health (Umberson 1987, Hahn 1993, Waite 1995, Ross 1995 Marks 1995, Kim and McKenry 2002, Simon 2002, Inaba et al 2005) and life satisfaction (Holt et al, 2008). This association may exist for a number of reasons, such as the financial benefits of partnerships (Hahn 1993, Waite 1995) and their social support functions (Waite 1995, Ross 1995).

Many previous studies concerning marital status and well-being do not take into account how associations may vary between men and women. This study analysed men and women separately and found that whilst positive effects were evident for both, there were larger positive effects for men. This supports previous findings that have suggested marriage is more advantageous for men than women (Gove and Tudor 1973, Gove et al 1983, Johnson 1991). Gove and Tudor (1973) originally argued that this gender difference was due to female gender roles, and women tending to leave employment and become predominantly responsible for taking care of the home and children.

The extent to which this argument is still applicable in contemporary society can be questioned as many married women now continue to be employed and can be seen to have more independence than in previous eras. However there are some alternative theories that may contribute to an explanation of this gender difference. Whilst less women may be giving up previous roles, they may subsequently be juggling more roles and demands which leads to distress. In this view, the lower benefits of marriage and cohabitation for women may reflect having to cope with a dual burden of home and work life.

It may be the case that men's well-being is more closely associated with personal relationships whereas precursors to female well-being are also drawn from other sources. Differing predictors of well-being between men and women have been evidenced elsewhere (Vermuelen and Mustard 2000, Hutchinson et al 2004). The larger positive effects of partnerships for men therefore may reflect their heightened sensitivity to them, whilst they are one of many important characteristics associated with women's well-being.

It may also be the case that it is marital *quality* that more specifically impacts upon women's well-being rather than marital status (Horwitz et al 1998). Furthermore, men and women may respond differently according to the measure of well-being being used, for example Horwitz et al (1996) found marriage to be associated with less depressive symptoms in men, yet less alcohol related problems in women.

Being married or in a cohabiting relationship was also compared to being never married. A positive effect of being in a partnership remained however it was smaller and less significant than when the categories of divorced, widowed or separated were also included. This suggests that whilst the psychological benefits of being in a partnership are still alluded too, they are most prominent when compared against those who have 'lost' a partnership.

Despite the view that cohabitation may be associated with less stability and commitment (Chambers 2012), there was not a significant difference in the effect upon well-being between those who were married compared to those who were cohabiting. Support is therefore not found for the view that marriage confers enhanced protective effects upon the individual compared to cohabiting (Kurdek 1991, Stack and Eshleman 1998, Kim and Mckenry 2002). These findings would

suggest that it is the effect of being in a partnership that is advantageous for well-being, as opposed to specifically being married.

To summarise, being in a partnership, is found to be positively associated with well-being, signifying the protective effect of close social bonds and attachments. This is the case whether a person is married or cohabiting, suggesting that whilst family change has occurred – with more people now cohabiting in modern society – both relationship forms confer protective benefits. This is particularly the case when compared to those who have ‘lost’ a partnership. Positive associations exist for both men and women, but are larger for men.

### ***1.6.2. Marital status as a moderator of poor health and well-being:***

Of more primary focus was the moderating role of marital status upon well-being when stressful life events occur. Assuming that a marital or cohabiting partnership is positively related to well-being, it was hypothesised that declines in well-being at stressful times would be less for those in a partnership than those who were not. Two stressful life events were investigated; becoming ill and becoming unemployed.

A transition into poorer health was associated with a decline in well-being. This echoes previous findings concerning the negative effects of illness and disability upon psychological well-being and life satisfaction (Turner and Noh 1988, Kendig et al 2000, Gaymen et al 2008, Schnittker 2005, Bierman et al 2010, Chen et al 2012) Palmore and Luikart 1972, Ferrer-i-Carbonell and Van Praag 2002, Strine 2007, Powdthavee and Oswald, 2008).

The role of marital status within the association between health and well-being has been less extensively studied. Of those studies that do investigate this, it has generally been found that being married may be beneficial for well-being

when poor health occurs (Sherbourne and Hays 1990, Rodrigue and Park 1996, Mancini and Bonnano 2006). Findings from this study also support this, yet further test these associations by examining a range of marital statuses, and also differences by gender.

Being in a married or cohabiting relationship was associated with smaller declines in well-being when poor health is encountered, compared to those who are never married, divorced, separated or widowed. Effect sizes were similar between men and women. The social and emotional support functions of partnerships likely help ease the distress involved when poor health occurs and provide a useful and beneficial coping resource (Newsom and Schulz 1996, Taylor and Lynch 2004).

When comparing against the never married only, being in a partnership was again associated with a smaller decline in well-being, however only in the case for men when GHQ scores were the outcome. There was a significant effect for both genders when life satisfaction was the outcome, although the effect was larger for men. Men therefore appear to be more 'protected' from some of the negative effects of poor health by a close partnership than women do, when compared to those who have never been married. This may reflect women's enhanced caring duties, and their adoption of a strong caring role towards their partner when he is ill, whereas women perhaps receive less care from their partners in comparison and cope more independently. They are therefore not 'protected' to such an extent, and less difference exists between them and never married women when illness occurs. On the other hand, those who have 'lost' a partnership may be less independent having previously had a partner to rely on and may miss this support, hence the stronger evidence of a protective effect for women when these marital statuses were included in the reference category.

Entering a state of poor health was associated with a similar sized decline in well-being amongst those who were married or cohabiting. It can be assumed therefore that both marital statuses confer similar levels of protective effects upon individuals when poor health is experienced, and if we are to adopt the argument that this protective effect is largely due to social support provision, that both marriage and cohabitation can be seen to provide similar levels of social support at stressful times. In addition to supporting the view that well-being levels are similar between those who are cohabiting and those who are married, this study therefore also suggests that when stressful life events occur, both marital statuses are protective and provide a supportive and beneficial resource.

### ***1.6.3. Marital status as a moderator of unemployment and well-being***

The stressful life event of becoming unemployed was also investigated in relation to well-being and the moderating effects of marital status. A transition into unemployment was negatively associated with well-being, with larger effects for men. This supports a considerable amount of research concerning the non-pecuniary costs of unemployment (Frese and Mohr 1987, Lahelma 1992, Clark and Oswald 1994, Korpi 1997, Montgomery et al 1999, McKee-Ryan et al 2000, Clark et al 2001, Powdthavee, 2012).

When investigating the role of marital status, it was found that when unemployment occurs, being in a partnership, as opposed to not being in a partnership or being never married, was associated with smaller declines in the life satisfaction of women. For men, being in a partnership did not significantly impact upon declines in either of the well-being measures. This therefore suggests that the protective effects of a close partnership may vary according to



particular stressors and also between men and women, with the association between partnerships and well-being being more complex than often acknowledged.

Why might there be some evidence of a protective effect for women and not men? Artazcoz et al (2004) also find that women appear to benefit from marriage when unemployment occurs where as men do not, and argues that this may be due to gendered social roles, whereby women are more likely to gain a sense of fulfilment from family and home based caring roles. Being in a partnership therefore provides them with alternative sources of recognition and purpose and the negative impact of unemployment is buffered.

For men however, being in employment is more pivotal to their sense of well-being, and their feelings of fulfilment and meaning, being more associated with the male breadwinner role. Furthermore, men who have a partner and potentially a mortgage and children, may have a heightened sense of duty and responsibility, perceiving it as their role to provide for them as a result of gendered norms. Being in a partnership may therefore actually lead to heightened concern and stress for men when unemployment occurs rather than being a beneficial resource.

It may also be the case that women are more protected by a partnership than men when unemployment occurs as husband's incomes tend to be higher. More women than men for example may work part-time in order to care for children and the home. Prior research has shown that in contemporary society, whilst a larger proportion of wives are contributing to household income and more couples are now equal earners than was common in previous decades, in the majority of partnerships husbands are still either the sole or major provider (Raley et al 2006, Winslowe-Bowe 2006). According to this argument, it is

therefore the *financial* benefits of partnerships, as opposed to the social support functions previously mentioned, that are protective.

Declines in well-being associated with becoming unemployed did not significantly vary according to whether a person was married or cohabiting. Once again, this negates the view of marriage having enhanced effects upon well-being, over and above cohabitation. Whilst being in a partnership has been seen to have some protective effect for women when unemployment is experienced, it does not appear to matter whether she is married or cohabiting.

#### ***1.6.4. Non-kin support***

The negative life events of becoming ill and becoming unemployed were also interacted with non-kin forms of support, to further understanding of how this may aid well-being at stressful times and also whether differences occur by gender. It had been noted that non-kin forms of support are distinct from marital forms of support in a number of ways (Ishii-Kintz and Seccombe 1989), for example with marital support being more personal and intimate, and therefore it was of interest whether any different patterns of effect are found.

Two measures of non kin support were used, the frequency of talking to neighbours and the frequency of meeting people. When a state of poor health was entered, the associated decline was smaller for those who talked to neighbours frequently, although for men only. A similar pattern was found in the case of entering unemployment, with men only appearing to benefit from talking to neighbours frequently, although the effect was less significant.

Whilst a considerable amount of previous research has found non kin support to be beneficial for well-being (Cantor 1979, Helliwell and Putnam 2004, Bjornskov, 2008, Powdthavee 2008), less has focused on differences by gender. Of that which does, either no gender difference has been found (Turner and Marino

1994, Umberson et al 1996, Gallachi 2007), or women have seemingly benefitted more so than men (Kroll, 2011). The findings of this study therefore are in contrast to previous studies concerning gender and non kin social support. This may be for a variety of reasons. Firstly, it is investigating the *moderating* role of non kin support in relation to two specific life events, and this may suggest different patterns to a direct relationship between non kin support and well-being. Furthermore, the measures of non kin social support may differ between the various studies highlighted, for example Gallachio (2007) focuses on support from friends only, whilst Turner and Marino (1994) include a range of potential sources of non kin support, but not neighbours. It may therefore be that support from neighbours is distinct to other forms of support.

Previous research has suggested that neighbourly support is more practical and instrumental (Ishii-Kintz and Seccombe, 1989), and it may be that this type of support particular suits men's needs and aids their well-being when stressful events occur. Perhaps they value the less emotional and more 'applied' forms of help, where as women do not strongly benefit from this type of support and are best assisted by the more affective and personal nature of support from a close partner.

## 1.7. Summary and conclusion

This study aimed to investigate marital status and well-being, and in particular the moderating role of marital status when the potentially stressful life events of becoming ill and becoming unemployed occur. Building upon earlier research in this area, a range of marital statuses were compared – taking into account recent changes in marital trends and the growth of cohabitation. Tests for any gender

differences were also performed, recognising the potential differences amongst men and women's social roles and needs.

To summarise the key findings, being in a partnership was associated with better well-being. This was particularly the case when compared against those who had lost a partnership (the divorced, separated and widowed), and still, but less so, when compared against the never married. There was no evidence of an enhanced well-being effect amongst those who were married compared to cohabitees, and therefore it appears to be being in a partnership that is of value, rather than being married specifically.

The moderating role of marital status differed according to life event and gender. In the case of poor health, being in a partnership, as opposed to having lost a partnership, was associated with smaller declines in well-being. When comparing those in a partnership to the never married, men seemed to benefit more, perhaps indicating the enhanced caring roles of women.

In the case of unemployment, being in a partnership was associated with smaller declines in well-being for women only. This may be due to women having alternative sources of purpose and meaning within the family, where as paid work is more central to a man's sense of fulfilment and well-being, with men being socially constructed to occupy the main breadwinner role. Additionally, it may reflect the higher incomes of husbands than wives.

Whilst non kin support was positively associated with well-being for both men and women, it only moderated the relationship between the life events and well-being for men. At time of distress, men appear to be buffered by neighbourly relations, suggesting that the particular form of social support yielded from this resource – likely more practical and unemotional than from close kin relations - is of value to men.

This study therefore adds to current knowledge in a number of ways. The associations between marital status and well-being are tested using a range of reference categories to generate more accurate findings. The changing nature of the family and marital trends is reflected with a specific focus on cohabitation. Marital status is also included as a moderator to ascertain how it impacts upon stressful events and well-being. Differences by gender are also taken into account, with considerations of gendered norms and social roles and their impact.

There are some methodological limitations that future research in this area could address. For example, the wellbeing measures used rely on respondents to self-report their evaluations of life satisfaction and GHQ responses. There is therefore the possibility that respondents may not choose the most accurate and truthful response, with it being most likely that low levels of wellbeing are underestimated, potentially due to social desirability concerns (Chen et al 1997). Whilst two measures have been used to try to overcome this slightly (respondents may be less likely to underreport on one particular measure due to different question wording, for example), as is recommended by Diener et al (1999), there is still the potential that self-evaluations may not wholly reflect true states.

Another area of limitation is that when comparing cohabitation to marriage, it is not included in the analysis how long a couple have been cohabiting. Whilst findings have found no evidence of differences between the protective states of marriage and cohabitation, this may predominantly be the case for couples who have been cohabiting for some time. Therefore firmer conclusions can not be drawn until a measure of cohabitation duration is additionally included in the analysis.

Furthermore, as previously mentioned, focus has been paid here on marital status – whether a person is married, cohabiting, widowed or divorced – and how this partnership status is associated with wellbeing. However, it may be the case that whilst a person is categorised as married, the quality of that partnership is compromised. It may therefore be more appropriate to use a measure of marital quality, or relationship satisfaction, to ascertain whether this is actually the more accurate construct behind associations with wellbeing, rather than the status itself.

There are a number of ways in which these findings could be investigated further, which will now be discussed. Whilst no difference was found in the protective effects of marriage versus cohabitation, further work in this area could more accurately test these two marital status categories. As previously noted, the length of cohabitation period could be taken into consideration, and also the length of relationship prior to cohabitation. Is it the case that cohabitation confers similar psychological benefits upon the individual as does marriage, but only when the couple have been cohabiting for a considerable time? Furthermore, how do results differ according to first and second marriages, or if a person has had multiple spells of cohabitation?

Whilst this study has included a focus on the life events of becoming ill and becoming unemployed, a range of other life events and transitions could also be investigated in a similar way to build a more thorough picture of how marital status may interact with these and well-being throughout the lifecourse. For example, the transition to parenthood is a significant life event that whilst generally being a positive and joyous event can also be a time of stress and upheaval. How do associations between becoming a parent and well-being differ according to whether the parent is married or cohabiting?

A wider range of non kin support measures could also be included in further analyses to build upon knowledge concerning this. For example, the frequency of seeing close friends or taking part in hobbies could be investigated. It may be that different form of non kin support benefit men and women differently and they may be more or less beneficial depending on the life event in question.

The interpretations concerning the gender differences and the moderating role of marital status could also be empirically tested. It was suggested that men may benefit more from a close partnership when poor health occurs due to women engaging in more care. Including items relating to caregiving roles may shed further light on this. It was also found that women benefit more so from a partnership when unemployment occurs.; incorporating information concerning attitudes towards gendered roles and work would be useful in testing whether this is attributable to men perceiving themselves as the major provider. How different family dynamics impact upon the association should also be tested to further understand how gender, unemployment and well-being interact; does the number of children impact upon father's stress as it increases his sense of responsibility? How does the income of his wife affect the relationship?

Overall, this study supports the association between marriage and well-being, and also points to the positive effects of cohabitation also. It also specifically investigates the how marital status interacts with stressful life events and well-being, finding that gender and the nature of event impact upon findings. Non kin support is also beneficial in aiding coping, for men in particular. The complexity of the marital status and well-being association is alluded too and a number of ideas for future research are highlighted to further test these relationships and extend knowledge concerning close relationships and well-being, differences by gender and their moderating role with life events.

## **2. Exploring youth well-being: the role of parent-child conflict and parental life satisfaction**

### **2.1. Abstract**

The role and position of the family in modern society is a contested issue. It has been argued that a growth in individualism and changes in the experiences of personal relationships have contributed to the erosion of family bonds and attachments and that the family is now in decline. However, it has also been maintained that the family can still be viewed as an important and influential social network, in which relationships and ties remain significant for the individual, contributing to well-being.

This study seeks to test whether family relationships remain an important associate of well-being. More specifically, parent-child relations are focused on, and whether aspects of these relations are associated with youth well-being. If they are, this supports the view of the enduring importance of family bonds. If no, or limited, associations are found, this may be taken to support the view that the family is in decline. Two aspects of the parent-child relationship are focused on; associations between parent-child conflict and youth well-being, and also associations between parental well-being and their child's well-being.

It is found that parental life satisfaction is related to self esteem and happiness levels of their children, but not the frequency of their anti-social behaviour. Parent-child conflict is related to all measures of youth well-being, although only arguments with dad are related to anti-social behaviour. Differences in associations also occur by the child's age and gender. Furthermore, when different time periods are analysed it is found that mother-child conflict at time



t-1 is associated with lower self esteem levels at time t, whilst prior father-child conflict is associated with more anti-social behaviour at time t.

These findings therefore support a view of the family as a social network in which relationships and interactive processes are important to individual well-being, and that a focus on these aspects of family life is a worthwhile direction for future family studies.

## **2.2. Introduction**

The family has undergone considerable social change in recent decades. Family life and family roles have altered and changed to the extent that it has been argued that the family currently holds less worth and value than ever before and that the importance of family ties has been eroded. However, opposing views suggest that the family remains a site of psychological and emotional importance, with family bonds and attachments remaining of prime significance to an individual and their well-being.

This study investigates aspects of parent-child relationships, and their significance for youth well-being. One such aspect is the relationship quality, whereby frequent conflict may foster negative emotions whilst infrequent conflict and a close, supportive relationship may generate a sense of security, positive emotional development and enhanced well-being. Previous research generally supports an association between parent-child conflict and lower child well-being, however has tended to focus on clinical psychological disorders rather than non-clinical reports of happiness or feelings of self esteem. Of the studies that do exist concerning parent-child relationships and the life satisfaction of their children, few have specifically focused on the role of gender, or on conflict levels specifically.

Less research has focused on another aspect of parent-child relationships and well-being; the impact of the child's exposure to their parent's well-being. Whilst well-being is often researched at the level of the individual, there is the possibility that people react to each others emotions, cognitive states and moods, and subsequently experience changes in their own well-being (Saxbe and Repetti, 2010). For example, if a parent is happier, their children may be exposed to happier family atmospheres, and more responsive interactions which come to improve their own well-being.

However there are a number of gaps in relevant existing research concerning the transmission of emotional states between parents and children. Much has tended to focus predominantly on parents and young children, noting the enhanced dependency and close bonds that are present in early infancy. Does the family still have importance in older childhood, when competing influences from school and peer groups may begin to take over? Furthermore, how do associations differ between mothers and fathers, sons and daughters?

This research therefore aims to explore and investigate parent-child relationships and their association with well-being. This adds to social knowledge in a number of ways. Firstly, it tests the view that, rather than being seen as in decline, family attachments remain important contributors to well-being, and that these personal relationships matter, despite claims of individualism eroding them. Knowledge concerning parent-child conflict, the intergenerational transmission of well-being, and the well-being of young people in general is added too.

The study is presented in the following order. To begin, a thorough review of literature pertaining to this area will be conducted. Following this, an overview of methodological decisions will be provided. The results of this study will then

be presented and discussed, with conclusions and ideas for further research noted.

### 2.3. The family and well-being

#### *2.3.1. The family in contemporary society*

In recent years, it has increasingly been asked, what need does the family fulfil in contemporary society? (Gabb, 2010). Arguments that society is now characterised by increased individualism and a decline in the strength and role of the family (Giddens 1992, Beck and Beck-Gernsheim 2001, Beck-Gernsheim 1998) have come to the fore. Such arguments use evidence such as declining marriage rates, increased divorce rates, and increased childlessness rates to support the argument that the family unit has been irreparably damaged. Adopting a more economical focus, Sennett (1988) focuses on modern capitalism and how changes to the employment and financial sphere have eroded traditional family life and relationship bonds.

Social theorists have also focused on personal close relationships in general, and how they are experienced in modern society. For example Giddens (1992) refers to a 'transformation of intimacy' whereby personal relationships are less stable and more flexible, and held onto only on the grounds of personal satisfaction. Bauman (2003), refers to 'liquid love', and how personal bonds – including those within the family, have become frail and less reliable than they once were. Loose, flexible bonds have replaced enduring and secure ones, as individuals increasingly seek freedom rather than security.

It has conversely been argued, that family attachments should still be seen as important and as important contributors to individual well-being. Whilst not denying that the family may be changing, bonds and attachments can still be

understood as influential and of significance. For example, whilst it may be the case that divorce is more commonplace in modern society, many marriages do still remain intact with spouses acting as important sources of social support for one another. Furthermore, many people who do divorce go on to re-partner suggesting relationships and attachments are still sought. Finally, as is the focus of this particular study, the bonds between parents and their children remain important for the child's well-being and future experiences. Indeed, a focus on the more intimate aspects of family life, such as family relationships, interactions and relational processes, have been presented as a useful and informative direction for family studies to pursue (Jamieson 1998, Gabb, 2010). Here, a focus on family attachments and their value, and on the quality rather than the structure of relationships, is presented as a means in which the family is seen as enduring, rather than declining.

There are therefore some competing theoretical viewpoints concerning the family. Whilst the family can be seen as in decline and with less secure bonds and ties, it can also be argued that whilst various examples of social change may have changed family life in some areas, family relationships and the more relational and intimate aspects of the family continue to have worth and meaning. One strand of this latter view is a focus on parent-child relations and by understanding the importance of this bond for well-being, a less pessimistic view on contemporary state of the family may be gained. This review will now focus more specifically on parent-child relations, and two aspects of family relationships which may shape well-being will now be discussed.

### ***2.3.2. Parent-child conflict, and well-being***

One such topic area that relates to parent-child relations within the family and their importance is the association between parent-child conflict and child well-

being. In his review, Barber (1992) states that one of the main mechanisms through which the family unit can exert an influence upon the child is via the quality of a parent-child relationship. A close, nurturing relationship with little conflict can help foster positive emotional development and a sense of emotional security, whilst a relationship fraught with frequent conflicts and a lack of attachment bonds may negatively influence a child's well-being.

A considerable amount of research has investigated aspects of parent-child conflict. Much has focused on older children in the adolescent years, with it being argued that this is a time in the life course when parent-child conflict is likely to peak. Aquilino (1997) describes how an adolescent experiences an intense growth in assertiveness and individualism. With this, their relationships with parents enters a phase of renegotiation as norms and boundaries change. As this process takes place, it often gives way to arguments. The different stages of older childhood have been investigated separately, with Laursen et al (1998) finding a greater frequency of conflict in early adolescence, but a greater intensity of conflict in later adolescence. Telzer et al (2013) also took gender into account, finding daughters to report more conflict with their parents than sons.

Much research has also considered the impact of conflict upon a child's well-being. A greater amount of conflict has consistently been found to be associated with a higher likelihood of psychological disorders (Burt et al 2003, Marmorsten and Iacano 2004, Burt et al 2005), suicide ideation (Shagle and Barber, 1993) and anti-social behaviour (Ingoldsby et al 2006, Bradford et al 2008, Khlar et al 2011. Barber and Delfabbro (2000) additionally studied particular family dyads, finding that conflict between fathers and sons to be particularly influential.

Some studies have investigated the causal relationship between conflict and well-being. Burt et al (2003) argue that the pathway is bidirectional, with both conflict leading to conduct problems and also conduct problems leading to more conflict. In contrast, Klahr et al (2011) found that conduct problems did not lead to conflict, and instead that conflict was the causal factor.

### ***2.3.3. Considerations of parent-child conflict and gender***

There has therefore been a significant amount of work concerning conflict between parents and children and the potential impact upon well-being levels. However, there are some areas that would benefit from further testing. With the exception of Barber and Delfabbro (2000), few of the studies have specifically focused on the gender of the youth and how this may influence associations. Whilst Barber and Delfabbro (2000) find boys to be more influenced by conflict levels, other studies have suggested that girls may be more vulnerable. For example, focusing on precursors to adolescent well-being, Lopez et al (2007) found that the family environment was particularly important for girls, and the school environment to be important for boys. Furthermore, it has been argued that girls tend to be socialised into valuing close, family relationships more so than boys (Davies and Windle, 1997), and therefore conflict with parents may be of enhanced consequence for them.

### ***2.3.4. Parent-child conflict and measures of well-being***

There is also a tendency to focus on psychological and clinical measures of well-being, such as conduct disorders. Much less is known concerning everyday, non-clinical measures of child well-being, such as evaluations of happiness. To what extent is parent-child conflict associated with common and general feelings of life satisfaction? As part of a large scale review on the topic, Gilman and Huebner

(2003) note that research concerning anxiety, depression and conduct disorders far outweighs that on non-clinical and more 'positive' aspects of child and adolescent well-being such as happiness.

Demo and Acock (1996) find that mother-adolescent disagreement to be related to a self-assessed measure of general life satisfaction, however only the mother was included in the analysis and therefore comparisons cannot be made with father-adolescent levels of conflict. Leung and Zhang (2003), investigating the life satisfaction of Chinese children aged between 12 and 14 years, found that parent-child relationship quality was strongly associated with life satisfaction, although they do not specifically focus on frequency of conflict specifically. Phinney and Ong (2002) measured parent-child discrepancies (differing views on family obligations) and found these to be negatively related to child life satisfaction, however potential gendered differences are not taken into account and actual conflict is not measured directly.

There is therefore a need to more thoroughly test the association between parent-child conflict and non clinical measures of well-being, fully taking into account the role of gender of youth, gender of parents and a more direct measure of conflict.

### ***2.3.5. The impact of other adolescent experiences***

Many of the existing studies do not take into account the range of other factors which also come to impact upon the well-being of older children, therefore it remains to be empirically tested how these factors influence the effect of parent-child conflict. For example, it has been noted that in later childhood, peers become increasingly important to a young person's well-being (Buote et al, 2007, Furman and Buhrmeister 2002). Claes (1994) found that those who had been referred for psychiatric treatment were more likely to have restricted friendship

networks and weaker attachment to friends. Friendships during later childhood can act as an extra source of security as a young person expands their attachments to outside the family and provide social support, stimulation and enjoyment (Erwin, 1988).

School experiences have also been associated with the well-being of adolescents. School engagement has been associated with better health and well-being (Carter et al, 2007) whilst positive relationships with teachers have been associated with the enhanced development of coping mechanisms (Zimmer-Gembeck and Locke, 2007) and improved self concepts (Cotterell, 1992). School bullying has been related to lower well-being (Forero et al 1999, Rigby 2000, Kaltiala-Heuno 2000). For example Bond et al (2000) found that self-reported depression and anxiety amongst secondary school students to be significantly associated with peer victimisation in the previous year.

These school and peer characteristics may therefore lessen or even negate the influence of parent-child conflict, suggesting that the family does become less important as a child ages. This can be taken to act as support for the view that the family is in decline – a sign of increased individualism, and other social institutions and relationships taking over the original functions of the family. By including these in the analysis, it can be therefore be tested whether an effect of conflict remains, and how it is influenced by these others factors.

To summarise, it has been seen that parent-child conflict is a potential influence upon child well-being, and a vehicle through which the importance of family relationships can be assessed. However there are some underexplored areas that would benefit from further empirical testing. Furthermore, rates of parent-child conflict is just one mechanism through which the family environment and its relationships can potentially be understood as exerting an influence upon child



well-being. Another possible mechanism which has received comparably less scholarly attention is the emotional transmission process between parent and child, and this will now be discussed.

### ***2.3.6. The well-being of parents:***

Another aspect of family relationships that may impact upon child well-being, is parental well-being. If parents are happier, this may spillover onto their children, thus improving their well-being. A happier parent is likely to interact more with their child, engage more positively with them, show more warmth and sensitivity and contribute to a happier home environment, all of which may contribute to improved well-being for the child (Downey and Coyne 1990, Dix 1991, Repetti and Wood, 1997, Crouter and Bumpus 2001). An unhappy parent, in comparison, may be more withdrawn and hostile, which may have negative consequences for the child. Support for such an association would lend weight to the argument that family relationships remain meaningful and influential, viewing the family like a social network where states of well-being may be transmitted between members due to their closeness and needs. If such associations are not found, this may be taken to support the view that the family is in decline, with more individualism and a weakening of family ties.

Existing empirical research has tested the idea that well-being states may be transmitted from one family member to another. Support has been found for an association between the well-being states of couples (Schoebi 2008, Westman and Vinokur 1998). For example, Saxbe and Repetti (2010) studied 360 couples who were asked to report their mood 4 times a day. Findings showed a convergence of negative affect, however, no such pattern was evidenced for positive affect, suggesting perhaps that this is less contagious. Furthermore, the convergence of negatives moods was particularly evident in the morning and evening when the

couples spent more time together, pointing towards the impact of the shared environment and increased interactions upon the likelihood of emotional states becoming similar.

Amongst parents and their children, having a depressed parent has been consistently found to be associated with a range of emotional and behavioural developmental problems in young children (Kiernan and Huerta 2008, Meadows 2007, Petterson and Albers 2001, Silberg et al 2010, Turney 2011). A longitudinal study by Hannington et al (2010) found that parental depressive symptoms were associated with increased temperament problems in infants at follow up.

Another mechanism through which the family can be seen to influence well-being levels is therefore via emotional transmission between its members. However, in contrast to the previously mentioned topic of parent-child conflict, there has been less research in this area and subsequently there are a number of gaps in existing knowledge, which will now be discussed.

### ***2.3.7. Older childhood and adolescence***

Whilst research concerning parent-child conflict is mostly concentrated on older children and adolescents, the bulk of research concerning the impact of parental well-being has tended to focus predominantly on maternal well-being and early child development, with studies focusing on mothers and their infants. Much of this research is based upon attachment theory (Bowlby 1969). Early in the child's life, an attachment is formed with their primary caregiver. However, different styles of attachment may emerge, with differing consequences for the child's emotional and social development (Ainsworth, 1978). For example, a securely attached child will explore their local surroundings, but seek comfort and reassurance from their caregiver if they become unsure or nervous. The

caregiver of a securely attached child is responsive and consistent, providing appropriate responses to their child's needs. This may be more likely if the parent has a positive state of well-being, and is therefore open and involved in their child's behaviour and communicates in an alert and reactive fashion.

However, an insecurely attached child will display different behaviour. For example the child may be seen to avoid their caregiver (insecure-avoidant), or perhaps conversely show an inconsistent pattern of both seeking and resisting their caregiver (insecure-resistant) (Ainsworth, 1978). Previous studies have shown that a caregiver experiencing low well-being is more likely to be detached and less responsive to their child, which may contribute to insecure attachment. For example, Cummings et al (2002) found evidence that negative emotions amongst parents were associated with insecure attachment amongst young children. In particular, maternal depression has also been associated with insecure attachment (Downey and Coyne 1990, Teti et al 1995,). Insecure attachment styles between parent and child which have been associated with emotional, cognitive and social disturbances amongst young children (Cummings et al 2002, Lyons-Ruth et al 1993, Pastor, 1981, Shaw and Vondra, 1995, Stams et al, 2002).

The increased focus on young children therefore reflects the intense bonding and attachment forming processes that take place when a child is young, and also that parents bear so much influence on young children as dependence levels are high and contact with other people, groups and social institutions is low. However, the association between parental well-being and that of their older children has been less extensively studied. This may be due to the assumption that older children are more independent and much less susceptible to parental effects, as was previously mentioned. Thompson (1994) notes that as a child

ages, they gradually acquire more independence over their emotions and the increasing ability to self regulate their own moods and levels of affect. Older childhood is therefore a life stage where individuals become more emotionally autonomous and relationships with parents may enter a stage of renegotiation (Collins and Steinberg, 2006). Furthermore, as has previously been discussed, school and peer characteristics may become more salient predictors of well-being at this life stage, lessening or even negating parental effects.

However, other evidence also suggests the continued importance of parental well-being upon older children's well-being. Parents may still constitute important attachment figures needed for positive well-being and social support (Diamond 2001, Diamond et al 2002). Therefore a withdrawn, unhappy parent may result in a declined amount of social support available to the young person. A parent's experience of work stress has been found to be negatively related to adolescent well-being and behaviour, suggesting a spillover effect from work to home that comes to influence the children in the house (Bumpus et al 1999, Galambos et al, 1998). Telzer and Fuligni (2013) found that positive family interactions – which may be more likely if parent's well-being is high - contribute to a reduction in adolescent children's emotional problems. Making use of panel data, Powdthavee (2008) found that parental depressive symptoms were associated with declined life satisfaction amongst older children one year later.

Further investigation into associations between parental and child well-being would therefore help to empirically test these opposing lines of argument and ascertain the extent of parental influence that remains into older childhood. At a time when individualism and a desire to become more independent from the family unit comes to the fore, is evidence of family intimacy and relationship processes still found?

### ***2.3.8. Influence of gender of youth and parent***

As was the case with parent-child conflict, more attention can also be paid to the role of gender, and whether this is associated with different patterns of vulnerability to parental well-being. Prior research has found that adolescent girls tend to report more distress than boys (Avison and Macalpine 1992, Nolan Hoeksema and Girgus 1994), which may be taken to suggest they are more vulnerable to the well-being states of their parents. This is supported by Davis and Windle (1997), who found that maternal depressive symptoms have been associated with poorer adolescent adjustment, particularly for girls.

However, in contrast to these findings, Turney (2011) found the well-being of boys to be more vulnerable to maternal depressive symptoms, noting that they may be more likely than girls to display angry and aggressive behaviour in order to attract the attention of a withdrawn mother. Further investigation into the role of gender would therefore be useful in testing whether associations between parental and child well-being do differ by gender, especially in a study focusing on older childhood, as this is when gender differences in depressive symptoms have been seen to emerge (Ge et al 2001, Nolen-Hoeksema and Girgus 1994).

In addition to the gender of youth, the gender of the parent may also be associated with certain patterns of effect. Amongst young children, maternal anxiety and depression, as opposed to paternal, has been found to be more associated with infant development (Meadows et al, 2007). However, a review of child and adolescent psychopathology has shown that the importance of fathers should not be underestimated and can be seen to increase as the child ages (Cassano et al, 2006). Ramchandani and Psychogiou (2009) also note a bias towards focusing predominantly on maternal effects, despite evidence that paternal effects can also be of significance. For example, Almeida et al (1999) found that father's distress was more likely to spillover to children, arguing that

mothers are better able to manage their emotions and prevent their children being exposed to them. Starrell (1994) used longitudinal data from the National Survey of Children to examine parent-child relationships, and found fathers to be particularly influential upon sons whilst mothers were important sources of support to both sons and daughters. Similarly, Hannington et al (2010) found that fathers well-being was associated with child well-being, but only for sons.

There is therefore a need to analyse the relationship between parental well-being and children, separately for mothers, fathers, sons and daughters, to both increase knowledge concerning paternal effects and also to capture whether certain parent-child dyads are more vulnerable to well-being transmission processes.

### ***2.3.9. Summary and emerging hypotheses***

Debate surrounds the contemporary role and purpose of the family; with increasing individualism and demographic change, is the worth and power of the family in decline? One line of argument is that more focus should be paid to family intimacy and relationships within the family. Amongst these claims of increasing individualism, do family bonds and ties remain important and meaningful, shaping the well-being of children within the family unit?

One mechanism through which this may take place is by levels of parent-child conflict. Previous findings have suggested that high levels of conflict have deleterious effects upon child well-being. However, much research has focused on clinical disorders, and less is known whether an effect is also exerted upon everyday feelings of happiness and well-being, even when a range of school and peer characteristics are additionally controlled for. Furthermore, do associations differ by the gender of parent and child, and the age of the child?

Another potential mechanism, to which there has been less attention paid, is the transmission of mood and affect between parent and child. Previous findings and theories can be taken to suggest that happier parents are associated with happier children, as they are more likely to expose their children to a happier environment, responsive interactions and positive moods and coping skills.

However, there are a number of areas which require further empirical testing. There is a need to specifically test the emotional transmission hypothesis with respect to older children. Much research has thus far focused on young children and infants, when levels of dependency are high and there is limited experience outside the family. Does parental well-being still exert an effect when the child is older, and more influenced by peers and school experiences? Furthermore, as with the topic of parent-child conflict, do patterns differ between mothers and fathers, sons and daughters? Previous research has suggested gender differences in the contributors to well-being, and therefore it would be useful to test whether any associations between parental and child well-being differ according to the gender of the parent and child.

The following general hypotheses can then be made;

- Levels of parent – child conflict will be associated with child well-being
- Parental and child well-being will be associated with each other
- Effects will be attenuated once a range of peer and school based characteristics are controlled for
- Different patterns of effect will occur between differing parent-child dyads
- Differing patterns of effect will occur between children of different age groups

## 2.4. Methodology

### *2.4.1. Data*

The data used for this study is from the British Household Panel Survey (BHPS). This survey began in 1991 with sample members being drawn from households across Great Britain. Since then, the sample members have been followed up and surveyed again on a yearly basis. The BHPS is therefore one of the longest running panel surveys, enabling a considerable amount of longitudinal data on a wide range of individual and household characteristics. This allows for effects over time to be noted and the impact of change to be investigated.

The BHPS includes both an adult questionnaire for adult respondents and also, from wave 4 onwards, a specific youth questionnaire for 11-15 year olds. This resulted in 10,882 youth observations from all two parent households, over the waves 4-17. Using unique identifiers, it was possible to match up parent's responses with those of their children, to test for any correlations between their respective measures of well-being. It was also possible to separate the observations of the mother and the father to allow comparisons.

### *2.4.2. Measures*

#### *Parental influence variables*

Parental well-being: Parental well-being was measured via the item 'How satisfied or dissatisfied are you with your life overall'. This item is asked at waves 6-10 and 12-17, and responses are logged on a 7 point scale with higher scores indicating a higher degree of satisfaction. This variable was recoded into a dummy variable to enable a comparison between those who have higher and lower life satisfaction, with original scores of 1-4 (Neither satisfied nor dissatisfied, Somewhat dissatisfied, Mostly dissatisfied, and completely



dissatisfied) being compared against the original scores of 5-7 (Somewhat satisfied, Mostly satisfied, and Completely satisfied). There were 8572 observations for mothers and 8138 for fathers.

A lagged measure of this variable was also generated and used as an independent variable in some of regression models. This required the respondent to have been present for two consecutive waves and resulting number of observations for mothers was 4178, and 4067 observations for fathers.

### ***Parent-child conflict***

Another mechanism via which the family context may shape youth well-being is by the relationship quality between parent and child. Furthermore, it was thought that this may likely influence any possible association between parental life satisfaction and child well-being. For example, it may be that parental life satisfaction only has an effect if mother/father and child are particularly close. The item ‘How often do you argue with your mum’ and the corresponding measure for the father, were therefore important variables of interest, both as a measure of parental influence and also as an important control variable. The possible responses ranged upon a scale of 1-4 and from ‘most days’ to ‘hardly ever’. There were 10,752 observations for frequency of arguing with mum, and 10,250 for arguing with dad. A lagged version of this variable was also used, which had 7,144 observations for arguing with mum, and 6,794 for dad.

### ***Youth well-being***

Youth well-being was measured by three different items, thought to capture potential different aspects of overall well-being. These measures constituted the dependent variables in the models. Firstly, a measure of self esteem was generated from a range of items of which respondents were asked to rate their level of agreement with; ‘I feel I have a number good qualities’, ‘I certainly feel

useless at times', 'I am a likeable person', 'I am inclined to feel I am a failure' and 'At times I feel I am no good at all'. All items were asked at waves 4-17. The scales for each of these were recoded to ensure they followed the same direction, and they were then combined into one variable, which had a scale of 0-15 with higher scores indicating higher self esteem. This variable had 10,642 observations and a cronbach's alpha coefficient of 0.72. These items occur in all waves of the youth survey.

The second measure of youth well-being was from the item 'Which best describes how you feel about your life as a whole?' This is asked at all waves of the youth survey. The response scale was from 1-7 with 1 labelled as 'completely happy' and 7 labelled as 'completely unhappy'. This was recoded to fit with the previous measure and to have higher scores indicating a higher degree of happiness. This youth happiness variable resulted in 10, 828 observations.

It was also noted in the literature that lower youth well-being may manifest itself as aggression. The item 'How often have you vandalised property in the previous year' was used to capture this. This item is asked at waves 7-10 and 17. The responses are on a 4 point scale, ranging from 'never' to 'often'. This item contained 4, 773 observations.

### ***Household and parental characteristics***

The number of siblings the youth respondent has was also controlled for. It may be the case that an only child is more susceptible to parental influences, whereas a child with many siblings is less so as they have more people in the household and perhaps a different degree of intensity in their parent-child relations. Parental monthly income was also included as a covariate, as it was thought that this may also influence the resources available to a youth in coping

with and responding to their parent's well-being, and also parental employment status (comparing those in employment to those who are not).

### ***School and peer characteristics***

It was of interest whether these features, suggested by the relevant literature to gain salience during this developmental time period, may lessen or even remove any previously noted parental effects. Variables were therefore included that captured how many friends a young person has, and also whether they are worried about bullying, which was a continuous variable with possible responses of 'a lot', 'a bit' and 'not at all'. School experiences were also measured via asking the young person if they like their teachers. Evaluations of teachers was measured by the level of agreement with the statement 'I like most of my teachers', with respondents choosing from the options of 'strongly disagree', 'disagree', 'agree' and 'strongly agree'.

### ***Lagged youth outcome***

A lagged version of the youth well-being variable was included as an independent variable; this was as part of an attempt to improve the ability to infer about the direction of effects. As noted, the parental influence variables were lagged by one wave and in some models were included as independent variables, whilst current child well-being was the dependent variable. This was as an attempt to ascertain which occurred first; the parent or child measure. However the prior level of child's well-being may be influencing this lagged measure of parental well-being, therefore this is included in the lagged models as a control. Causal inferences can still not be made, but it is suggested that this approach is a worthwhile addition to including measures from the same observation period.

### ***2.4.3. Analytical Methods***

As was the case with chapter 1, all 18 waves of the survey were used, and a balanced panel was selected for analysis (see Chapter 1 for discussion on this). Whilst this does reduce the number of observation available, it also avoids the error and bias that can be introduced with attrition and missing data.

Descriptive statistics were generated from cross tabulations and frequency tables, enabling the distribution of some of the key variables to be analysed. Mean scores were also compared, for examples between male and female youths and their wellbeing scores.

Both OLS and fixed effects regression models were used. Fixed effects models additionally control for time invariant unobserved characteristics, and model change at the individual level. They are more commonly used when analysing panel data, measuring the changes in variables over time to estimate the effects of the independent variables on the dependent variable. Both sets of results have been included here in order to enable comparisons, for example is the significance of a finding lost once unobserved time invariant factors are controlled for? If so, this would suggest that these are biasing the OLS result.

Furthermore, a stepwise approach is used with the regression model, where firstly parental measures are included, and secondly the full range of youth measures and controls are included. This again allows for comparisons of how effects change once other variables are added, and allows for commenting on the relationships between covariates and any attenuation of effects that may occur.

The number of observations does differ according to the dependent variable that is being used. In particular, there are less observation in models where youth vandalism is the dependent variable. This is due to youth vandalism occurring less frequently than the other wellbeing measures in the survey, and therefore having less observations relating to this. The number of observations does

become lower still when regression models are split by age and gender. It was decided to still use this measure – as it potentially provided a useful measure of more externalising aspects of wellbeing compared to happiness and self esteem – however it must be noted that numbers are comparably smaller and therefore more caution is needed when interpreting the findings.

## 2.5. Results

### *2.5.1. Parental life satisfaction*

Table 2-1 presents some descriptive information concerning parental life satisfactions scores

TABLE 2-1 PARENTAL LIFE SATISFACTION				
		Satisfied	Dissatisfied or neither satisfied nor dissatisfied	Total number of observations
Mum	life	6,222 (72.59%)	2,350 (27.41%)	8572 (100%)
Dad life satisfaction		6,064 (74.51%)	2,074 (25.49%)	8138 (100%)

The majority of both mothers and fathers rate their level of life satisfaction as either, somewhat, mostly, or completely satisfied. A slightly higher proportion of fathers are in this category. 25% of fathers and 27% of mothers rate their level of life satisfaction more unfavourable, as either completely dissatisfied, mostly dissatisfied, somewhat dissatisfied, or neither satisfied nor dissatisfied.

### *2.5.2. Arguing with parents*

Table 2-2 features the frequencies of arguing with the child's mum and dad:

TABLE 2-2 FREQUENCY OF ARGUING WITH PARENTS		
	Frequency of arguing with mum	Frequency of arguing with dad
Most days	1,265 (11.77%)	900 (8.78%)
More than once a week	2,083 (19.37%)	1,409 (13.75%)
Less than once a week	2,604 (24.22%)	2,346 (22.89%)
Hardly ever	4,800 (44.64%)	5,595 (54.59%)
Total	10,752 (100%)	10,250 (100%)

A larger proportion of youth participants report a higher frequency of arguing with mum than with dad. Approximately 30% of youths argue with their mum on most days or more than once a week, compared to approximately 23% that report arguing with dad this frequently.

However the majority of the youths report that they argue with their parents infrequently. Over half report that they argue with dad ‘hardly ever’, and just under half report they do so with their mother.

### *2.5.3. Youth self esteem*

The following tables relate to the youth well-being measures of self esteem, happiness and vandalising behaviour. Table 2-3 shows the dispersion of youth self esteem scores.

TABLE 2-3 YOUTH SELF ESTEEM

Self-esteem	Frequency
0	10 (0.09%)
1	8 (0.08%)
2	26 (0.24%)
3	36 (0.34%)
4	65 (0.61%)
5	135 (1.27%)
6	280 (2.63%)
7	572 (5.37%)
8	1,092 (10.26%)
9	1,468 (13.79%)
10	1,735 (16.30%)
11	1,536 (14.43%)
12	1,305 (12.26%)
13	1,135 (10.66%)
14	653 (6.14%)
15	586 (5.51%)
Total	10,642 (100%)

There is a positive skew towards the higher end of the self esteem scale, indicating that the majority of respondents have a mid to high score. Approximately 50% of respondents score between 10 and 15. There is a peak at score 11, before the frequency trails off slightly. The mean score is 10.46. There are some, but relatively few observations of the very lowest self esteem scores, with only 2.63% score very low, between 1 and 5.

Table 2-4 and Table 2-5 display a comparison of mean youth self esteem scores by gender and parental life satisfaction respectively.

TABLE 2-4 MEAN SELF ESTEEM SCORE BY GENDER

	Pooled	Boys	Girls
Mean youth self esteem score	10.4 (n=10,632)	10.9 (n=5397)	9.9 (n=5245)

Amongst the youth sample, there are 5397 observations for boys and 5245 observations for girls. When comparing mean self esteem scores between them, it can be seen that whilst for both groups mean scores are at the higher end of the scale, the mean score for girls is 1 point lower than it is for boys, indicating lower self esteem.

TABLE 2-5 MEAN SELF ESTEEM SCORE BY PARENTAL LIFE SATISFACTION

	Mum life satisfaction high	Mum life satisfaction low	Dad life satisfaction high	Dad life satisfaction low
Mean youth self-esteem score	10.6 (n=6084)	10.1 (n=2301)	10.6 (n=5933)	10.1 (2028)

When comparing mean youth self esteem scores by parental life satisfaction, higher mean scores are noted when both life satisfaction is in the higher category. This is the case with both maternal and paternal life satisfaction.

TABLE 2-6 MEAN SELF ESTEEM SCORE BY FREQUENCY OF ARGUING WITH PARENTS

	Argue with mum most days/more than once a week	Argue with mum less than once a week/hardly ever	Argue with dad most days/more than once a week	Argue with dad less than once a week/hardly ever
Mean youth self-esteem score	9.8 (n=3266)	10.7 (n=7257)	9.8 (n=2233)	10.6 (7772)

Mean scores are higher for those who argue with their parents infrequently. This is the case for both arguing with mum and arguing with dad.

#### ***2.5.4. Youth happiness***

The dispersion of youth happiness scores is presented in Table 2-7. This item was a 1-7 scale with higher numbers indicating higher self reported levels of happiness.

TABLE 2-7 YOUTH HAPPINESS

Happiness	Frequency
1	147 (1.36%)
2	110 (1.02%)
3	241 (2.23%)
4	829 (7.76%)
5	1,744 (16.11%)
6	3,770 (34.82%)
7	3,987 (36.82%)
Mean	5.87
Total	10,828 (100%)

Focusing on youth happiness, it can be seen that the majority of youth respondents report a high level of happiness, with over 70% scoring on the top two scale points. Just over 2% report very low levels of happiness, scoring only 1 or 2 points.

TABLE 2-8 MEAN HAPPINESS SCORE BY GENDER

	Pooled	Boys	Girls
Mean youth happiness score	5.87 (n=10828)	5.99 (n=5496)	5.76 (n=5332)

The mean youth happiness score is just under 6 for the pooled sample of youth respondents. When comparing between boys and girls, boys have a higher mean score of 5.99, compared to girls who have a mean score of 5.76.

TABLE 2-9 MEAN HAPPINESS SCORE BY PARENTAL LIFE SATISFACTION

	Mum life satisfaction high	Mum life satisfaction high	Dad life satisfaction high	Dad life satisfaction high
Mean youth happiness score	5.97 (n=6195)	5.68 (n=2339)	5.97 (n=6035)	5.65 (n=2068)

The mean happiness scores are higher amongst those who have parents reporting higher levels of life satisfaction. There is an approximately 0.3 points difference amongst the high and low groups. This is the case for both maternal and paternal satisfaction levels.

TABLE 2-10 MEAN HAPPINESS SCORE BY FREQUENCY OF ARGUING WITH PARENTS

	Argue with mum most days/more than once a week	Argue with mum less than once a week/hardly ever	Argue with dad most days/more than once a week	Argue with dad less than once a week/hardly ever
Mean youth happiness score	5.5 (n=3329)	6.0 (n=7372)	5.5(n=2294)	5.9 (n=7907)



In the case of both arguing with mum and arguing with dad, mean happiness scores were higher by approximately half a point amongst those youths who reported lower frequencies.

### *2.5.5. Vandalising behaviour*

The third measure of youth well-being aimed to capture feelings of aggression, which may manifest in adolescence and potentially capture a difference aspect of well-being. Table 2-11 shows a tabulation of this item.

TABLE 2-11 FREQUENCY OF VANDALISING BEHAVIOUR, BY GENDER

How many times vandalised property in last year?	Frequency Pooled	Frequency (boys)	Frequency (girls)
Never	3784 (80.98%)	1788 (75.19%)	1996 (87.16%)
Once or twice	763 (16.33%)	511 (21.49%)	252 (11.00%)
Several times	83 (1.78%)	53 (2.23%)	30 (1.31%)
Often	38 (0.81%)	26 (1.09%)	12 (0.52%)

The vast majority of youth respondents have not engaged with any vandalising behaviour. Approximately 16% have done so once or twice, and very small amounts have done so more often than this. When comparing amongst boys and girls, slightly higher proportions of boys have engaged in vandalising behaviour at the higher frequencies, and considerably more have done so once or twice.

Frequencies can also be compared according to levels of parental life satisfaction

TABLE 2-12 FREQUENCY OF VANDALISING BEHAVIOUR, BY PARENTAL LIFE SATISFACTION

How many times vandalised property in last year?	Mum life satisfaction high	Mum life satisfaction low	Dad life satisfaction high	Dad life satisfaction low
Never	2130 (82.30%)	805 (78.39%)	2040 (81.24%)	737 (81.80%)
Once or twice	398 (15.38%)	181 (17.85%)	416 (16.57%)	138 (15.32%)
Several times	43 (1.66%)	16 (1.58%)	35 (1.39%)	20 (2.22%)
Often	17 (0.66%)	12 (1.18%)	20 (0.80%)	6 (0.67%)

Comparing firstly amongst maternal satisfaction levels, results do not significantly differ amongst the youths who have a mother with either high or low life satisfaction. A slightly higher proportion of those whose mother has high satisfaction had not engaged in any vandalising behaviour in the previous year. A slightly higher proportion of those who had mothers with low satisfaction had done so often. There were also no significant differences when comparing amongst paternal life satisfaction levels, with frequencies of vandalising behaviour being very similar between the two groups.

TABLE 2-13 FREQUENCY OF VANDALISING BEHAVIOUR, BY FREQUENCY OF ARGUING WITH PARENTS

How many times vandalised property in last year?	Argue with mum most days/more than once a week	Argue with mum less than once a week/hardly ever	Argue with dad most days/more than once a week	Argue with dad less than once a week/hardly ever
Never	920 (72.10%)	2827 (84.72%)	631 (72.36%)	2822 (83.79%)
Once or twice	290 (22.73%)	458 (13.72%)	200 (22.94%)	485 (14.40%)
Several times	47 (3.68%)	33 (0.99%)	27 (3.10%)	42 (1.25%)
Often	19 (1.49%)	19 (0.57%)	14 (1.61%)	19 (0.56%)

The highest proportions of frequent engagement with vandalism ('several times' or 'often') are found amongst those who report more frequent arguments with parents ('most days' or 'more than once a week'). Of those youth respondents who report engaging in vandalism 'once or twice', rates are again higher amongst those who report more frequent arguments with parents. For example, 23% of those who report frequent arguments with mum have engaged in vandalism once or twice, compared to 14% who less frequently argue.

TABLE 2-14 REGRESSION MODEL WITH SELF ESTEEM AS DEPENDENT VARIABLE

	Model 1		Model 3	Model 4
	Parental well-being measures only( OLS)	Parental conflict measures only (OLS)	With youth controls added (OLS)	Fixed effects results
Mum lower life satisfaction	-0.381 ***		-0.233**	-0.147 *
Dad lower life satisfaction	-0.336 ***		-0.179 **	-0.127
Higher frequency of arguing with mum		-0.380 ***	-0.280 ***	-0.203 ***
Higher frequency of arguing with dad		-0.119 **	-0.061 *	-0.041 *
Mum annual income			0.047	-0.399
Dad annual income			0.213	-0.096
Mum employed			0.285 **	0.187
Dad employed			0.134	0.024
Age			-0.025	-0.002
Number of siblings			-0.071**	0.046
Female youth			-0.776 ***	
Youth's number of friends			0.031* **	0.023 ***
Youth worries about bullying			-0.474***	-0.194 ***
Youth dislikes teachers			-0.499***	-0.212 ***
N	5969	5969	5969	5969
R squared	0.01	0.03	0.15	0.11

The first set of regression model results have youth self esteem as the dependent variable. Model 1 features the results from the OLS model which only includes the two main independent variables of interest, maternal and paternal life satisfaction. Lower levels are found to be significantly associated with lower self esteem amongst their children. Effect sizes are of a similar size for mother maternal life satisfaction ( $b=-0.381$ ,  $p=0.000$ ) and paternal levels ( $b=-0.331$ ,  $p=0.000$ ).

Model 2 contains the parental-conflict measures. Both arguing with dad and arguing with mum are negatively related to youth self esteem. A higher frequency of arguing with mum is associated with a decline in self esteem of -0.380 ( $p=0.000$ ), whilst for dad the corresponding effect is -0.119 ( $p=0.002$ ).

When the full range of parental and youth controls are added (Model 3), the  $r$  squared value rises to 0.15, indicating that more of the variance in youth self esteem is explained once these covariates are taken into account. Positive associations between parental life satisfaction and the self esteem of their children remain, although effect size and significance levels are reduced. A mother having lower life satisfaction is associated with a decline of -0.233

( $p=0.023$ ) in youth self esteem whilst lower paternal life satisfaction is associated with a decline of  $-0.179$  ( $p=0.019$ ). These effects therefore remain even when a range of school and peer characteristics are additionally controlled for. In this model, parent-child conflict measures are also included, and therefore the association between parent and child well-being also remains when this is controlled for too, indicating that the association does not only exist amongst parent and children who are particularly close, or who are particularly volatile. The effects of parent-child conflict are also attenuated in this model, with the effect of more frequent arguments with mum is reduced to  $-0.280$  ( $p=0.000$ ), and the effect for dad is now only significant at the 10% level ( $b=0.061$ ,  $p=0.065$ ).

This model also displays which of the other covariates are associated with youth self esteem. Of the parental variables, mother being employed was positively associated with youth self esteem ( $b=0.285$ ,  $p=0.044$ ). Youth self esteem was found to decline with the number of siblings ( $b=0.071$ ,  $p=0.032$ ) and be lower for females ( $b=0.776$ ,  $p=0.000$ ). Variables relating to school and friendships were all significantly related to self esteem levels, with concerns over bullying being negatively related ( $b= -0.474$ ,  $p=0.000$ ) along with disliking teachers ( $b= -0.499$ ,  $p=0.000$ ), whilst the number of friends was positively associated ( $b=0.031$ ,  $p=0.000$ ).

Model 4 runs the same regression model but this time using fixed effects. This model therefore additionally controls for unobserved time invariant characteristics which may be biasing the OLS results. A positive association is still found between maternal life satisfaction and youth self esteem ( $b=0.147$ ,  $p=0.085$ ), but only at the 10% significance level. The association between paternal life satisfaction and youth self esteem is lost, indicating that unobserved characteristics were contributing to the previously found association.

In the case of parent-child conflict, a higher frequency of arguing with mum remains strongly significant even under fixed effects ( $b=-0.203$ ,  $p=0.000$ ), and arguing with dad is still significant at the 10% level ( $b=0.041$ ,  $p=0.080$ ). The school and peer group characteristics also remain associated with youth self esteem in this model.

TABLE 2-15 REGRESSION MODEL WITH YOUTH HAPPINESS AS DEPENDENT VARIABLE

	Model 1 Parental well-being measures only (OLS)	Model 2 Parental conflict measures only (OLS)	Model 3 With youth controls added (OLS)	Model 4 Fixed effects results
Mum lower life satisfaction	-0.223 ***		-0.156***	-0.091 **
Dad lower life satisfaction	-0.236 ***		-0.165 ***	-0.092 **
Higher frequency of arguing with mum		-0.160 ***	-0.120***	-0.067***
Higher frequency of arguing with dad		-0.085 ***	-0.056 ***	-0.061 **
Mum annual income			0.188	-0.090
Dad annual income			0.036	-0.182
Mum employed			0.104 **	0.082
Dad employed			0.059	0.053
Age			-0.059 **	-0.038 **
Number of siblings			-0.036**	0.049
Female youth			-0.120 ***	
Youth's number of friends			0.011* **	0.010 ***
Youth worries about bullying			-0.291***	-0.090***
Youth dislikes teachers			-0.182***	-0.216 ***
N	6069	6069	6069	6069
R squared	0.01	0.04	0.12	0.11

Youth happiness was also included as a dependent variable. Model 1 shows that when no additional controls were included in the model, both lower maternal life satisfaction ( $b=-0.223$ ,  $p=0.000$ ), and paternal life satisfaction ( $b=-0.226$ ,  $p=0.000$ ) are negatively associated with youth happiness.

Model 2 features the parental conflict variables. These were also strongly associated with youth happiness. A higher frequency of arguing with mum is associated with a decline of  $-0.160$  ( $p=0.000$ ), whilst arguing with dad is associated with a decline of  $-0.085$  ( $p=0.000$ )

Model 3 has the full range of controls. The effects of parental life satisfaction and parental conflict are now smaller but remain strongly significant. Mother being employed is again positively associated with youth well-being, as it was in the previous model ( $b=0.104$ ,  $p=0.019$ ). Youth happiness is seen to decline with

age ( $b = -0.059$ ,  $p = 0.048$ ), the number of siblings ( $b = -0.036$ ,  $p = 0.043$ ) and also for females ( $b = -0.120$ ,  $p = 0.000$ ). The school and peer characteristics follow the same patterns as seen previously, with youth happiness being negatively associated with a dislike of teachers ( $b = -0.182$ ,  $p = 0.000$ ) and concerns over bullying ( $b = -0.182$ ,  $p = 0.000$ ), and positively associated with number of friends ( $b = 0.011$ ,  $p = 0.000$ ).

In the fixed effects model (Model 4), associations between parental and child well-being remain, despite unobserved time invariant characteristics now being controlled for. A decline in maternal life satisfaction is associated with a decline in youth happiness of  $-0.091$  ( $p = 0.044$ ) and a decline in paternal life satisfaction is associated with a very similar size decline of  $-0.092$  ( $p = 0.037$ ). More frequent arguments with mum also remains significant ( $b = -0.067$ ,  $p = 0.000$ ), as does more frequent arguments with dad ( $b = 0.061$ ,  $p = 0.011$ ). Of the control variables, maternal employment is not significant in this model, however the other variables follow the same pattern as they did in the OLS model.

TABLE 2-16 REGRESSION MODEL WITH YOUTH VANDALISM AS DEPENDENT VARIABLE

	Model 1 Parental well-being measures only (OLS)	Model 2 Parental conflict measures only (OLS)	Model 3 With youth controls added (OLS)	Model 4 Fixed effects results
Mum lower life satisfaction	0.016		0.006	0.020
Dad lower life satisfaction	0.010		0.005	0.046
Higher frequency of arguing with mum		0.059 **	0.005	0.004
Higher frequency of arguing with dad		0.104 **	0.094 **	0.081 **
Mum annual income			0.166	-0.104
Dad annual income			0.157	-0.129
Mum employed			0.013	0.037
Dad employed			0.013	0.170
Age			0.010	0.055
Number of siblings			-0.07	0.053
Female youth			-0.122***	
Youth's number of friends			0.003**	0.002
Youth worries about bullying			-0.015*	-0.015
Youth dislikes teachers			0.107***	0.067 **
N	2569	2569	2569	2569
R squared	0.01	0.02	0.08	0.04

In all models, parental life satisfaction was found to not be significantly associated with the frequency of vandalism amongst youths. However, model 2

shows that the parent-child conflict variables were of importance. A higher frequency of arguing with mum was significant ( $b=0.059$ ,  $p=0.002$ ) as was arguing with dad ( $b=0.104$ ,  $p=0.000$ ).

Once the control variables were added (Model 3), only a paternal effect remains, with a higher frequency of arguing with dad being associated with a higher frequency of vandalising behaviour ( $b=0.094$ ,  $p=0.012$ ). This effects also remained in the fixed effects models ( $b=0.080$ ,  $p=0.018$ )

Under fixed effects (Model 3), the variables that remained significantly associated with the frequency of vandalising behaviour were a dislike of teachers ( $b=0.067$ ,  $p=0.011$ ) and frequency of arguing with dad ( $b= -0.081$ ,  $p=0.000$ ).

### 2.5.6. Results by gender

TABLE 2-17 REGRESSION MODEL WITH YOUTH SELF ESTEEM AS DEPENDENT VARIABLE, BY GENDER

	Model 1 Boys only (OLS)	Model 2 Girls only (OLS)	Model 3 Boys only (FE)	Model 4 Girls only (FE)
Mum lower life satisfaction	-0.243 **	-0.226**	-0.306 **	-0.000
Dad lower life satisfaction	-0.190 **	-0.68**	-0.028	-0.206
Higher frequency of arguing with mum	-0.287 ***	-0.284 ***	-0.193 ***	-0.179 **
Higher frequency of arguing with dad	-0.005	-0.120 **	-0.046	0.105*
Mum annual income	0.101	0.431	-0.044	0.130
Dad annual income	0.249	0.572	-0.034	0.114
Mum employed	0.351 **	0.210 *	0.340 *	0.011
Dad employed	0.296	0.127	0.047	0.019
Age	0.061 **	-0.112 ***	0.110 **	-0.120 **
Number of siblings	-0.044	-0.090 **	0.106	-0.034
Youth's number of friends	0.038 ***	0.023 **	0.028 ***	0.009 *
Youth worries about bullying	-0.484 ***	-0.455 ***	-0.215 ***	-0.221***
Youth dislikes teachers	-0.422 ***	-0.564 ***	-0.185 ***	-0.249 ***
N	3067	2902	3067	2902
R squared	0.11	0.13	0.09	0.11

Models 1 and 2 present the results from OLS regression models. For both male and female youths, their self esteem is significantly associated with the life satisfaction of both their mother and father. Effect sizes are quite similar where maternal life satisfaction is concerned, although paternal life satisfaction has a larger effect for boys ( $b= -0.190$ ,  $p=0.019$  than for girls ( $b= -0.068$ ,  $p=0.030$ ). Once time invariant unobserved characteristics are controlled for in the fixed effects

models (Models 3 and 4), there is only a significant association between maternal life satisfaction and the self esteem of male youths ( $b = -0.306$ ,  $p = 0.042$ ).

In the case of parent-child conflict, a higher frequency of arguing with mum was associated with lower self esteem in all models. However a higher frequency of arguing with dad was significant only for girls in the OLS model ( $b = -0.120$ ,  $p = 0.009$ ) and in fixed effects too ( $b = -0.105$ ,  $p = 0.055$ ).

Some differences in the effects of the control variables between males and female youths can additionally be noted. In the case of age, both OLS and fixed effects models show a positive effect for boys, and a negative effect for girls. This suggests that self esteem rises for boys, yet declines for girls between the ages of 11 and 15. Disliking teachers, having friends, and concerns over bullying are significantly associated with self esteem for both male and female youths.

TABLE 2-18 REGRESSION MODEL WITH YOUTH HAPPINESS AS DEPENDENT VARIABLE, BY GENDER

	Model 1 Boys only (OLS)	Model 2 Girls only (OLS)	Model 3 Boys only (FE)	Model 4 Girls only (FE)
Mum lower life satisfaction	-0.214***	-0.093*	-0.155 **	-0.019
Dad lower life satisfaction	-0.120 **	-0.211***	-0.048	-0.135
Higher frequency of arguing with mum	-0.137 ***	-0.106 ***	-0.050	-0.082 **
Higher frequency of arguing with dad	-0.015	-0.091 ***	-0.018	-0.099 **
Mum annual income	0.066	0.228	0.067	0.180
Dad annual income	0.086	0.503	0.064	0.198
Mum employed	0.084 *	0.123 *	0.134	0.030
Dad employed	0.020	0.172	0.149	0.020
Age	-0.031 **	-0.087 ***	-0.011 *	-0.062 **
Number of siblings	-0.032	-0.042 *	0.087	-0.002
Youth's number of friends	0.013 ***	0.006 *	0.013***	0.014 *
Youth worries about bullying	-0.174 ***	-0.188 ***	-0.47***	-0.106***
Youth dislikes teachers	-0.245 ***	-0.334 ***	-0.192***	-0.227 ***
N	3122	2941	3122	2941
R squared	0.10	0.14	0.09	0.07

With youth happiness as the dependent variable, both lower maternal and paternal life satisfaction are negatively associated with youth happiness for both boys and girls in the OLS model. However, in Models 3 and 4, which are the fixed effects model results, maternal life satisfaction is significant only for boys ( $b = -0.155$ ,  $p = 0.022$ ).



Arguing with mum was related to the happiness of both boys and girls in the OLS models, however once unobserved characteristics were additionally controlled for, as association remained only for girls ( $b = -0.082$ ,  $p = 0.025$ ). In the case of arguing with dad, this was also significant only for girls in the fixed effects model ( $b = -0.099$ ,  $p = 0.032$ ).

Happiness was seen to decline with age amongst the youth samples, for both boys and girls. This is in contrast to self esteem, which declined for girls but rose for boys. Number of friends was significantly related to happiness for both boys and girls, but more strongly for boys. Concerns over bullying and disliking teachers were negatively related to happiness for both genders.

TABLE 2-19 REGRESSION MODEL WITH YOUTH VANDALISM AS DEPENDENT VARIABLE, BY GENDER

	Model 1		Model 2		Model 3	Model 4	
	Boys (OLS)	only	Girls (OLS)	only	Boys only (FE)	Girls (FE)	only
Mum lower life satisfaction	0.001		0.009		0.054	0.018	
Dad lower life satisfaction	0.043		0.009		0.065	-0.005	
Higher frequency of arguing with mum	0.056		0.008		0.006	0.009	
Higher frequency of arguing with dad	0.044 **		0.051 **		0.070 **	0.095 **	
Mum annual income	-0.158		-0.016		0.129	0.112	
Dad annual income	-0.130		-0.173		0.184	0.110	
Mum employed	0.042		0.005		0.027	0.053	
Dad employed	0.082		0.140		0.067	0.121	
Age	-0.017 *		-0.05		-0.071*	-0.036	
Number of siblings	-0.002		-0.016		0.004	-0.111	
Youth's number of friends	0.01		0.006		0.001	0.005	
Youth worries about bullying	-0.025 *		-0.007		-0.020	-0.017	
Youth dislikes teachers	0.123 ***		0.091 ***		0.062**	0.066	
N	1343		1225		1343	1225	
R squared	0.08		0.07		0.05	0.03	

As was seen in the previous pooled regression models, parental life satisfaction was not significantly related to vandalising behaviour, and this was the case for both boys and girls.

Arguments with dad were significantly related to vandalism in all models, for both boys and girls. Indeed, in the girl's fixed effects model, this was the only variable found to be significant. Arguments with mum were not significant in any models, however.

Of the control variables, age was related to the frequency of vandalism for boys only showing that frequency decreased with age. A dislike of teachers was positively associated with a higher frequency of vandalism for both boys and girls in the OLS models, but only for boys in the fixed effects models.

### 2.5.7. Results by age

TABLE 2-20 REGRESSION MODEL WITH YOUTH SELF ESTEEM AS DEPENDENT VARIABLE, BY AGE

	Model 1	Model 2	Model 3	Model 4
	11-13 year olds (OLS)	14-15 year olds (OLS)	11-13 year olds (FE)	14-15 year olds (FE)
Mum lower life satisfaction	-0.290 **	-0.160	-0.118	-0.132
Dad lower life satisfaction	-0.199 **	-0.139	-0.196	-0.026
Higher frequency of arguing with mum	-0.219 ***	-0.369 ***	-0.148 **	-0.108
Higher frequency of arguing with dad	-0.089	-0.028	-0.105	-0.115
Mum annual income	0.169	0.168	-0.071	0.187
Dad annual income	0.276	0.656	-0.154	0.238
Mum employed	0.365 **	0.152	0.271	0.446
Dad employed	0.267	0.054	0.191	0.780
Female	-0.562 ***	-1.017 ***		
Number of siblings	-0.101	-0.017	0.004	-0.384
Youth's number of friends	0.033 ***	0.033 ***	0.019 **	0.036 **
Youth worries about bullying	-0.482 ***	-0.451 ***	-0.223 ***	-0.251 **
Youth dislikes teachers	-0.515 ***	-0.468 ***	0.245 ***	0.229 **
N	3539	2430	3539	2430
R squared	0.14	0.16	0.12	0.05

Comparing against the youngest and oldest subgroups within the youth sample, it can be seen in Models 1 and 2 that the significant association between parental life satisfaction and youth self esteem is witnessed for the 11-13 year olds only. Lower maternal life satisfaction is associated with a decline of -0.290 ( $p=0.001$ ) in youth self esteem whilst lower paternal life satisfaction is associated with a decline of -0.199 ( $p=0.009$ ). The effect is lost however once the fixed effects models are run (Models 3 and 4).

In the case of parent-child relationship quality, whilst arguing with mum is significantly associated with self-esteem for both age groups in the OLS models, it only holds for the 11-13 year olds in the fixed effects models. More frequent arguing is associated with lower self esteem for this subgroup ( $b= -0.148$ ,  $p=0.003$ ). Arguments with dad are not significant in any of the models.

A positive effect of mum being in employment was also only found for the younger subgroup in the OLS model ( $b=0.365$ ,  $p=0.041$ ). The negative effect of being female was larger amongst the older group ( $b=1.017$ ,  $p=0.000$ ) than the younger ( $b=0.562$ ,  $p=0.000$ ), but significant in both cases. School and peer characteristics provided similar results for both groups, and consistently significant in both the OLS and fixed effects models. Once again, concerns over bullying and a dislike of teachers were associated with lower self esteem levels, whilst a larger number of friends was associated with higher levels.

TABLE 2-21 REGRESSION MODEL WITH YOUTH HAPPINESS AS DEPENDENT VARIABLE, BY AGE

	Model 1	Model 2	Model 3	Model 4
	11-13 year olds (OLS)	14 -15 year olds(OLS)	11-13 year olds (FE)	14 -15 year olds (FE)
Mum lower life satisfaction	-0.164 ***	-0.145 **	-0.029	-0.135
Dad lower life satisfaction	-0.143 ***	-0.204 ***	-0.161 **	-0.035
Higher frequency of arguing with mum	-0.108 ***	-0.134 ***	-0.080 **	-0.072
Higher frequency of arguing with dad	-0.068 **	-0.036	-0.019	-0.020
Mum annual income	0.075	0.312	0.170	0.125
Dad annual income	0.154	0.162	0.457	0.155
Mum employed	0.122 **	0.067	0.044	0.198
Dad employed	0.032	0.095	0.051	0.155
Female	-0.077***	-0.180 ***		
Number of siblings	-0.041 **	-0.026	0.182	0.433
Youth's number of friends	0.010**	0.012 ***	0.011 **	0.012**
Youth worries about bullying	-0.170 ***	-0.202 ***	-0.080 ***	-0.150 **
Youth dislikes teachers	0.305 ***	0.282***	0.258 ***	0.241 **
N	3610	2453	3610	2453
R squared	0.11	0.13	0.05	0.03

With youth happiness as the outcome variable, both measures of parental life satisfaction are significant for both age groups, with lower life satisfaction being associated with lower levels of happiness. However once unobserved characteristics are controlled for in the fixed effects models (models 3 and 4), a significant association only remains between paternal life satisfaction and the happiness levels of the 11-13 year olds ( $b= -0.161$ ,  $p=0.021$ ).

Arguing with mum was related to happiness for both age groups in the OLS models, and additionally arguments with dad were significant for 11-13 year olds. In the fixed effects models however, less frequent arguing with mum is positively related to the happiness of 11-13 year olds only ( $b= -0.080$ ,  $p= 0.046$ ).

Mum being employed is once again significant only for 11-13 year olds in the OLS model ( $b=0.122$ ,  $p=0.041$ ). Being female is once again associated with lower happiness, and the effect is larger for 14-15 year olds ( $b= -0.180$ ,  $p=0.000$ ) than for 11-13 year olds ( $b= -0.077$ ,  $p=0.000$ ). The school and peer characteristics remain significant in all models and follow the same pattern as previously found with concerns over bullying and a dislike of teachers being negatively related to happiness, and number of friends being positively related.

TABLE 2-22 REGRESSION MODEL WITH FREQUENCY OF VANDALISM AS DEPENDENT VARIABLE, BY AGE

	Model 1	Model 2	Model 3	Model 4
	11-13 year olds (OLS)	14-15 year olds(OLS)	11-13 year olds (FE)	14-15 year olds (FE)
Mum lower life satisfaction	0.014	0.007	0.095 *	0.047
Dad lower life satisfaction	0.003	0.057	0.047	-0.145
Higher frequency of arguing with mum	0.077 ***	0.022	-0.032	0.027
Higher frequency of arguing with dad	0.018*	0.035 *	0.053 *	0.140 **
Mum annual income	0.186	0.101	0.014	0.066
Dad annual income	0.116	-0.227	0.116	0.427
Mum employed	0.020	0.002	0.090	0.058
Dad employed	0.039	-0.035	0.049	0.098
Female	-0.103***	-0.155 ***		
Number of siblings	-0.011	-0.004	0.069	-0.174
Youth's number of friends	0.004 **	0.002	0.006 **	0.002
Youth worries about bullying	-0.011	-0.028 *	-0.013	-0.075 **
Youth dislikes teachers	0.094 ***	0.133 ***	0.056**	0.110*
N	1576	992	1576	992
R squared	0.09	0.08	0.05	0.02

The frequency of vandalising behaviour was also included as an outcome variable. In the OLS models, neither of the parental life satisfaction variables were found to be significant for either of the age groups. In the fixed effects models however, lower paternal life satisfaction was associated with an increase in frequency for 11-13 year olds, but only at the 10% significance level ( $b= -0.095$ ,  $p=0.091$ ).

More arguments with mum were only associated with vandalism for 11-13 year olds in the OLS model. Arguing with dad was however significant in all models, although often mildly. The largest and most strongly significant effect for arguing with dad was in the fixed effects model for 14-15 year olds ( $b= 0.140$ ,  $p=0.018$ ).

Being female was associated with a lower frequency for 11-13 year olds ( $b = -0.103$ ,  $p = 0.000$ ) and for the 14-15 year olds ( $b = -0.155$ ,  $p = 0.000$ ). Concerns over bullying were suggestive of less vandalising behaviour for 14-15 year olds in both the OLS model ( $b = -0.028$ ,  $p = 0.088$ ) and the fixed effects model ( $b = -0.075$ ,  $p = 0.039$ ). Disliking teachers was suggestive of a higher frequency, for both age groups in all models.

### *2.5.8. Using lagged measures of parental influence*

TABLE 2-23 LAGGED PARENTAL INFLUENCE VARIABLES

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Self esteem (OLS)	Self esteem (FE)	Happiness (OLS)	Happiness (FE)	Vandalism (OLS)	Vandalism (FE)
Mum lower life satisfaction t-1	-0.098	-0.100	-0.049	-0.027	0.026	0.059
Dad lower life satisfaction t-1	-0.070	-0.021	-0.067	-0.014	0.019	0.067
More arguments with Mum t-1	-0.122 **	-0.119 **	-0.039 **	-0.001	0.023	0.040
More arguments with dad t- 1	-0.054	-0.073	-0.059 **	-0.035	0.043 **	0.065 **
Outcome variable t-1	0.489 ***	0.107 ***	0.342 ***	0.149 ***	0.422 ***	0.259 ***
Mum annual income	0.040	0.165	0.344	0.110	-0.129	-0.097
Dad annual income	0.197	0.292	0.252	0.110	-0.180	-0.084
Mum employed	0.160 *	0.093	0.065	0.042	0.064 **	-0.040
Dad employed	0.128	0.057	0.117	0.055	0.021	-0.019
Age	-0.092 **	-0.068 **	-0.097 ***	-0.114 ***	0.016	0.064 ***
Number of siblings	-0.109	-0.071**	-0.027	-0.021	-0.015	0.108
Female youth	-0.551 **		-0.112 ***		-0.095 ***	
Youth's number of friends	0.022 ***	0.013***	0.011 ***	0.014 ***	0.006 *	0.003
Youth worries about bullying	-0.375 ***	-0.263***	-0.187 ***	-0.112 ***	-0.016	-0.014
Youth dislikes teachers	-0.330 ***	-0.191***	-0.246 ***	-0.169 ***	0.099 ***	0.062 **
N	4093	4093	4230	4230	1495	1495
R squared	0.24	0.03	0.25	0.03	0.23	0.03

When assessing child well-being and parental factors in the same time period, associations can be noted however causal relationships cannot be ascertained. It may, for example, be that maternal life satisfaction is shaping child self-esteem, however it may also be the case that a child who has low self esteem is causing mum's life satisfaction to be lower, as she worries and feels upset for her child. Similarly, higher frequencies of parent-child conflict may occur prior to lower levels of child well-being, as the child becomes distressed over the arguments. However, it may also be the case that a child with lower well-being – particularly

if manifesting itself as aggression and anti-social behaviour, may generate a higher frequency of arguments.

To make some progress in attempting to understand whether the parental influence measures may play a causal role, the preceding set of regression results use a lagged measure of these variables. That is to say, the variables of parental life satisfaction and frequency of arguments are measured at time  $t-1$ , and the youth well-being outcomes at time  $t$ . The parental measures therefore occur *prior* to the youth measures. Whilst still not defining a causal relationship, a significant association here may be taken to suggest that the parental measures are perhaps influencing the child measures.

However it may also be the case that the time  $t-1$  parental measures are still caused by the  $t-1$  youth measures, and therefore that it is these which really have the causal power. For example, if lower maternal life satisfaction at time  $t-1$  is found to be associated with lower youth happiness at time  $t$ , this may be due to lower youth happiness at  $t-1$ . A lagged version of the outcome variable (i.e. youth happiness at time  $t-1$ ) is therefore also included as a control variable, to hold this constant.

Models 1 and 2 display the results for the outcome variable of youth self esteem. In the OLS model (model 1), a higher frequency of arguing with mum at time  $t-1$  is significantly associated with lower self esteem scores at time  $t$  ( $b = -0.122$ ,  $p = 0.001$ ). This is also found in the fixed effects model ( $b = -0.019$ ,  $p = 0.041$ ).

There is no association between parental life satisfaction or frequency of arguments with dad at time  $t-1$  and youth self esteem at time  $t$ , whereas associations were found between these measures when all measured at time  $t$ . This may suggest that only observations taken closely together are seen to

influence one another, and also may suggest that reverse causality (youth self esteem shaping parental life satisfaction) exists.

Models 3 and 4 feature youth happiness as the outcome variable. In both the OLS model and the fixed effects models, there is no significant association between parental life satisfaction at  $t-1$  and current youth happiness. However in the OLS model, lower frequencies of arguments with mum was positively associated with current happiness levels ( $b=0.039$ ,  $b-0.009$ ) as was less arguments with dad also ( $b=0.059$ ,  $p=0.001$ ). However once unobserved time invariant characteristics were controlled for in the fixed effects model, these association were lost.

Finally, when investigating potential effects upon a youth's frequency of engaging in vandalising behaviour, arguments with dad appeared to be of importance. In the OLS model, more arguments with dad in the preceding observation was associated with a higher frequency of current vandalising behaviour ( $b= 0.043$ ,  $p=0.035$ ), and this remained the case in the fixed effects model also ( $b= 0.065$ ,  $p=0.024$ ).

## **2.6. Summary of results and discussion**

The family is a contested issue in contemporary sociological theory. Some theorists have argued that the family is in decline, with social change bringing about increased choice and individualism which has robbed the family of its functions and moral value (Giddens 1992, Sennett 1998, Beck-Gernsheim 1999).

A more recent perspective within family studies is a focus more on the emotional and psychological power of the family, and a focus on intimacy and close family relationships (Gabb 2010). This stands in contrast to notions of individualism, and instead argues that despite the processes of social change that may have

altered certain aspects of family life, family ties and relational processes have endured and continue to be of importance to the well-being of family members.

This study has followed in this vein by investigating aspects of the parent-child bond, and how this may be associated with well-being. Furthermore, children aged between 11 and 15 are focused on, which investigates whether any parental influence remain into older childhood. The influences of parental well-being and parent-child conflict are used alongside the child well-being measures of self-esteem, happiness and anti-social behaviour (frequency of vandalism). Differences according to the gender of the parent and of the youth have been taken into account, and also age differences amongst the youth sample.

### ***2.6.1. Parent-child conflict***

Focusing firstly on findings relating to the frequency of parent-child conflict, the descriptive analysis revealed that the majority of youth respondents rarely argue with their parents. Mean well-being scores were however lower and vandalism frequency was higher amongst those who reported more conflict.

The regression analysis showed an association between higher frequencies of arguing with mum and dad and lower self esteem, although results were more strongly significant for mother-child arguments. Both mother-child and father-child conflict were related to lower happiness levels amongst the youth respondents, although higher levels of mother-child conflict were associated with the happiness levels of girls only. When investigating vandalism, the frequency of arguing with dad was of importance. These findings are therefore in line with previous research that has found support for the negative effects of parent-child conflict (Burt et al 2003, Marmorsten and Iacano 2004, Ingoldsby et al 2006, Bradford et al 2008, Khlar et al 2011) however specifically they additionally



focus on non-clinical measures of well-being and also consider differences by gender of parent and child.

Arguments with dad were found to be associated with vandalism behaviour for both sons and daughters. This was also the case amongst both 11-13 year olds and 14-15 year olds. Why may dad be of specific importance to this particular measure? It may be that something specific to the father-child relationship that, when under stress, lends itself to more aggressive and externalising behaviour. Bronte-Tinkew et al (2006) also found that fathers were associated with their child's delinquent behaviour, and note that this may be due to their more authoritarian parenting styles. If conflict is occurring, it may be the case that the father's authoritarianism comes to the fore, and propels the child to react in an aggressive and anti-social way, such as vandalism. Associations between fathers and authoritarian parenting styles have also been found elsewhere (Conrade and Ho 2001).

This finding may also relate to social norms of parenting, and the distinct functions that a mother and father perform. Milevsky et al (2006) note how whilst the mother takes part in more of the everyday care of the child, the father is the 'fun' parent, more responsible for play and entertainment. If this is lost when father-child conflict occurs, the child may rebel in a more aggressive way than when mother-child conflict occurs.

When using a lagged measure of parent –child conflict, there were some significant associations. In the fixed effects models, a higher frequency of mother-child arguments in the previous observation were associated with lower self esteem in the current observation. More arguments with dad at time t-1 were also associated with more vandalism at time t. There were also associations between prior conflict being associated with current happiness

levels, but only in the OLS models. These findings may be taken to suggest that conflict levels do potentially shape child well-being outcomes, although bidirectional associations can also not be ruled out.

To summarise, parent-child relationship quality, measured here via the frequency of arguments, appear to be significantly associated with child-well-being levels. This supports the view that family relationships are a worthwhile strand of family based research. It does not lend weight to the individualism and 'family in decline' arguments. Whilst not denying that family change has occurred in other areas, these findings suggest that parent-child relationships continue to 'matter' to individuals within the family unit. At a time of increasing individualism in later childhood and adolescence, relationships with parents are still seen to be significantly related to the well-being of the child. In addition, results differ by gender and the outcome measure used, drawing attention to the gendered nature of family relationships and well-being. .

### ***2.6.2. Parental life satisfaction***

The descriptive analysis revealed that mean self-esteem and happiness scores are lower amongst those whose parent's life satisfaction is lower. Once unobserved characteristics were controlled for in the fixed effects regression models, lower maternal life satisfaction was significantly and negatively associated with child self-esteem, whilst both lower maternal and paternal life satisfaction were negatively associated with happiness levels. This adds to previous research which has found support for emotional transmission between family members (Westman and Vinokur 1998, Schoebi 2008, Saxbe and Repetti 2010) but specifically focuses on parents and children. In the parent-child relationship, an unhappy parent is more likely to be withdrawn and less interactive (Downey and Coyne 1990, Dix 1991, Repetti and Wood, 1997, Crouter

and Bumpus 2001) which then upsets the child. Similarly, it may also reflect shared household stressors, although this may be less likely between parents and children than between partners.

Furthermore, whilst a number of previous studies have found support for associations between parent and infant well-being (Kiernan and Huerta 2008, Meadows 2007, Petterson and Albers 2001, Silberg et al 2010, Turney 2011), this finds evidence of an association with older children too. This is despite older childhood and adolescence being commonly thought of as a time when emotional autonomy increases and the family environment may begin to have less influence (Thompson 1994, Collins and Steinberg, 2006). However, when the 11-13 year old members of the youth sample were analysed separately to the 14 and 15 year olds, there was some suggestion that the 11-13 year olds were more susceptible to parental well-being levels. This may suggest that whilst parental influence does continue into older childhood, it may decline into adolescence, perhaps as school and peer factors come to the fore and independence levels increase further.

Family members – mothers, fathers, sons and daughters, were all analysed separately to investigate whether there were any differences according to social role and gender. Some particular patterns were noted, for example maternal life satisfaction was associated with the self esteem and happiness levels of sons only. This is in agreement with Turney (2011) who found sons to be more vulnerable to maternal depressive symptoms. This finding is in contrast to previous arguments that have suggested girls may be more vulnerable, due to typically being more heavily socialised into valuing close relationships and family interactions (Davis and Windle, 1997). However it has also been found that girls are more subject to peer influence (Brown et al 1986) and more

connected to their peer network (Urberg et al 1995), and it may therefore be the case that peer experiences are of greater significance for daughters where as parental (or has been found in this study, more specifically maternal) influences remain stronger for sons.

Parental well-being levels were not found to be associated with the frequency of vandalism in any of the models. A child's distress over their parent's lower life satisfaction therefore may be more likely to manifest itself as internalising problems such as lower self esteem and happiness, as opposed to externalising problems such as vandalism.

When lagged measures of parental well-being were used, associations were no longer significant. This may reflect that the time period through which parental well-being exerts an influence on child happiness and self esteem is a small one, and therefore only observations taken at the same time show significance. A child's well-being is only impacted upon by their mother being unhappy recently for example, as opposed to their mother being unhappy 1 year ago. It may also indicate that the causal relationship is reversed; that child well-being levels drive parental life satisfaction. In this case, a child with low well-being may withdraw and change their behaviour, which then comes to negatively influence the parent's happiness.

To summarise, support is found for associations between parental life satisfaction and child happiness and self esteem. Different patterns of effect are evidenced according to the gender of the child and parent, prompting considerations of gendered socialisation and development. However the causal pathway is not clear, and it may be the case that a bidirectional association exist in which parents influence children but also children influence their parents. Rather than claiming that the family is an arena in which parental

well-being influences the well-being of their children, it should therefore more appropriately be claimed that it is a social network in which all family members are potentially affected by each other. In this sense, until further analysis is able to ascertain causal pathways, the family and its relationships can be understood as important for all members, not just children.

### ***2.6.3. Other factors associated with youth well-being***

Aside from these parental influences, a range of other characteristics were included in the models. In addition to learning about other factors also related to youth well-being, these also allowed an appreciation of how parental effects are attenuated once other factors are controlled for. Once they were included, the parental influence variables generally remained significant but effect size became smaller.

School and peer characteristics were amongst the most consistent of the factors associated with youth well-being. A dislike of school and concerns over bullying were negatively related to self esteem and happiness, whilst number of friends was positively related. This was the case amongst boys and girls, and the younger and older subsets of the sample. When investigating frequency of vandalism, a dislike of teachers was consistently and positively associated, in particular for boys.

These findings therefore support the bulk of research which suggests that school and peer experiences are important contributors to youth well-being (Cotterell 1992, Forero et al 1999, Bond et al 2000, Kaltiala-Heuno 2000, Rigby 2000, Wilkins-Sturmer 2001, Furman and Buhrmeister 2002, Buote et al 2007, Zimmer-Gembeck and Locke, 2007). However, parental influences also are seen to remain important too.

## 2.7. Conclusion

Amongst a background of family critique, arguing that social change has brought about irreparable changes to family life, relationships and stability, there is also a view that a closer focus on family intimacy and close relationships can reveal continuing evidence of the worth of the family and its contribution to the effective functioning of society. This study aimed to contribute to this debate, by assessing the associations between aspects of parent-child relationships and the child's well-being. If associations were found, this would lend weight to the argument that the family can be understood as a site of emotional and psychological purpose, and that family bonds remain important to individual well-being.

Evidence was found for associations between parent-child conflict and all measures of child well-being, indicating the importance of parent-child relationship quality. Associations were also found between parental life satisfaction and child self esteem and happiness, suggesting well-being states may spillover from one family member to another as relationships and interaction may be compromised by lower well-being.

Results did differ by gender. For example, maternal life satisfaction was more strongly associated with the happiness of sons than daughters, whilst maternal-child conflict was more associated with daughters than sons. Furthermore, conflict with a child's father, not their mother, was related to their frequency of vandalism. The processes of gender socialisation, gendered patterns of well-being and gendered parenting roles are therefore alluded too. Results also differ by age, with the self esteem and happiness of the younger subgroup (11-13 year olds) generally more strongly associated with parental influences. This may

reflect the increasing salience of peer and school factors in older childhood which come to reduce some of the parental effects.

The study therefore makes various contributions to social knowledge. Family relationships and processes are seen as important topics for study, despite claims of increasing individualism and the decline of the family. It also takes into account gender, revealing particular patterns of effects, and indicates the importance of considering not just parents and children, but more specifically mothers, fathers, sons and daughters separately. Age is also considered, recognising the differences that may occur between younger and older adolescents. A range of well-being outcomes are also used, to help capture the multifaceted nature of the term. The analysis also controls for various other factors that may likely be associated with youth well-being, and thus models parental influence when taking these into account.

This study does have the limitation of using self reported measures of wellbeing. As has previously been discussed, the use of such measures does enable the possibility of respondents not providing entirely truthful results, with respondents being most likely to under-report low levels of wellbeing due to social desirability concerns (Chen et al 1997, Soubelet and Salthouse 2012).

The measures of parent-child conflict are also based on self-report measures, meaning that responses may again be under or over reported due to social desirability concerns. They may also be confounded by or inaccurate recollection and perception. For example, the same question could be posed to both the child and the parent, with perhaps different results. This potentially therefore reduces the validity of findings.

The study could also overcome some current limitations by more fully researching into causal pathways and ascertaining whether, for example, conflict

shapes wellbeing or wellbeing shapes conflict, and whether parent wellbeing shapes child wellbeing or vice versa. It is, for example, likely that if a child has low self-esteem, then parental wellbeing may be lower as a result of this, and yet it is also the case that if parental life satisfaction is low, then this may contribute to a child's lower self-esteem. Whilst it has been argued here that effects are most likely reciprocal, and some efforts have been made here to use lagged measures of variables to try to isolate the time periods of variables (i.e. parental wellbeing at time  $t-1$  and child wellbeing at time  $t$ ), more advanced panel data analysis could more accurately and thoroughly measure these associations and provide some firmer conclusions about the causal directions and mechanisms that occur.

Future research could also focus on different family types; this study has included only those from 2 parent households, however do findings differ amongst single parent families for example? It may be that in such households, the child is more reliant on their parent, and stronger effects are seen. The role that siblings play in associations has also not been directly addressed here, how do parent-child associations differ when the child is an only child compared to one with a number of siblings?

Further investigation could also be made into the range of household stressors that may lie behind either low parental well-being or higher levels of parental-conflict, to ascertain which stressors have the most effect. For example, is parental well-being more of an influence if it occurs due to financial or relationship strain? Which sources of stress are most likely to spillover between parent and child? Furthermore, is episodic parent-child conflict, that perhaps surrounds the youth's behaviour at school, associated with different outcomes than just a general long-term underlying current of conflict in the parent-child



relationship? Gaining some information regarding the different potential social contexts surrounding the parent-child relationship would therefore be of interest in furthering understandings.

To conclude, the family is a topic of considerable debate, and one of many opposing views. This paper has argued that a focus on the intimate and personal level of the family is an area in which the family can still be seen as important in contemporary society.

### **3. Social roles and sleep; the impact of a baby upon sleeping habits and associations with well-being**

#### **3.1. Abstract**

The transition to motherhood is a significant event in a woman's life. A major new social role is adopted and changes take place across a range of life domains. This paper seeks to explore the transition to motherhood by focusing upon one particular area of adjustment in a new mother's life; sleep. This has received relatively little attention in relation to the experience of becoming a mother, yet constitutes a considerable change that is encountered. A sociological perspective upon sleep is utilised which focuses on how this new social role impacts upon sleep habits and how this effects maternal well-being. Differences between mothers and fathers, parents and non-parents, and also between mothers of different social and demographic characteristics are explored. A focus on the subjective experience of these sleep changes is also addressed.

Quantitative analysis of data from Understanding Society, a large scale social survey, is complimented by the secondary analysis of data from 36 interviews that track a woman from pregnancy to one year after the birth. It is found that mothers of a young child report poorer sleep experiences, and this can negatively influence well-being levels. However the effect of poorer sleep upon well-being is larger amongst those who are not parents. Differences also occur between mothers and fathers, with both sleep duration and quality being of importance to fathers, yet only sleep quality being of importance to mothers. Mothers of younger age and those who are not married or cohabiting appear to be more at risk of lower well-being. The qualitative analysis also finds sleep changes to be

an integral part of the transition to motherhood and one of the most salient challenges encountered. A variety of coping mechanisms are utilized and learnt over time. Meanings that are attached to these sleep changes and reasons concerning why establishing less disruptive sleeping is so important to mothers also emerge from the analysis.

It is argued that sleep is an important and worthy consideration when investigating the transition to motherhood and maternal well-being, but that attention should also be paid to fathers and different subgroups of mothers. A closer focus on sleep changes and their potential effects upon well-being should become a more prominent aspect of ante and post natal care.

### **3.2. Introduction**

Sleep is often understood as a natural phenomenon, and therefore not a topic suitable for sociological interest. It is primarily understood in biological terms for example, with a focus on how the body enters a sleep state and what biological processes take place when in that state, or perhaps from a more psychological angle, focusing on dreaming and states of consciousness (Lee-Chong, 2006). As a result, it has previously not been the subject of a great deal of sociological attention, instead being seen as a personal, asocial matter (Williams and Bendelow, 1998).

However, a growing body of literature asserts that there are social aspects of sleep, and that it is a worthwhile and informative area of sociological study. Topics such as how sleep is impacted upon by social roles and the gendered aspects of sleep have been approached from a sociological perspective and contribute to a recognition that sleep can be understood as having social significance. Sleep quality is also closely associated with health and well-being,

and therefore has implications for societal well-being and the quest for a happier society, topics which have also been subject to a growth of interest and research in recent years. Concerns over the negative effects of sleep deprivation, and potential associations between this and physical and mental illnesses, exemplify the need for improved understanding and awareness of sleep and its importance for society.

One such social group that may be particularly vulnerable to sleep changes and potential risks for well-being are new mothers. The transition into motherhood is marked as a time of great upheaval and adjustment, and one such area of change is sleep habits. It has been argued that mothers tend to be viewed as primary carers of infants and responsible for night-time care, and are therefore most likely to experience considerably less and more disrupted sleep. This study therefore will focus on new mothers and their sleep habits, the experiences of these sleep changes and associations with well-being.

Of course, the proposition that new mothers will likely have disrupted sleep and that this may negatively impact upon their transition to motherhood and their general well-being is neither novel nor surprising. However, this is a simplistic view which does not reflect the complexities and variations in the association between sleep, motherhood and well-being, nor the various lines of enquiry that would benefit from further testing.

This research makes a number of contributions to social knowledge. Data from a large scale survey will provide information concerning the sleeping habits of new mothers and effects upon well-being, however it will also test the assertion that it is women who are primarily affected. Comparisons are also made with those who are not parents, and mothers of different social and demographic characteristics. To complement this, a qualitative approach can unveil more in

depth and subjective information concerning the experience of these sleep changes, the meanings ascribed to them, and the adaptation processes engaged with.

The study is presented in the following order. Firstly, a literature review will feature an overview of the existing theories and studies relevant to this topic, in particular relating to the sociology of sleep and the transition to motherhood. A discussion of the methodology used is then included, firstly the quantitative followed by the qualitative. The analysis is then presented, followed by a summary and discussion of this, and finally some concluding remarks are made.

### **3.3. Motherhood, sleep and well-being**

#### ***3.3.1. The new role of motherhood***

The transition to motherhood marks a new era in a woman's life as she undergoes a number of changes and adaptations that are brought about by the birth of her baby. "Becoming a mother involves moving from a known, current reality to an unknown, new reality" (Mercer, 2004:227) and the need to become accustomed to a 'new normal' (Martell, 2001). In sociological terms, the transition to motherhood can therefore be understood as involving the adoption of a new social role, which Hogg et al (1995) regard as involving a set of new social expectations and behaviours. As Collett (2005:328) states "A woman may become a mother by giving birth, but she truly takes on a mother identity by playing a socially defined, publicly visible role".

The adoption of this role may be unlike the adoption of others that take place throughout a woman's life. For example, unlike new social roles such as that of a new employee, the role of a mother comes with little detail on how to adopt and sustain this new status (Collett, 2005). Furthermore, the all-encompassing

nature of the mother role may mean it is more likely than other social roles to be associated with role strain, where pressure and stress result from attempting to master the new role alongside fulfilling pre-existing role such as wife or employee (Simon 1992, Morris and Levine Coley 2004 ).

Some studies have investigated the transition to motherhood and highlighted the range of adaptation and learning processes that take place, as the mother becomes accustomed to her new role. For example, Rubin (1961) noted that following the birth, the mother requires care and support from others to recover and take in the experience of the birth. Following this phase, attention turns to the care of the infant and the mother begins an intensive learning process. The next stage is that of 'letting go', incorporating the giving up of previous roles and lifestyles, accepting that the day to day reality of caring for a baby may be different to what was expected, and embracing the new role of a parent.

In a more recent study of becoming a mother, Rogan et al (1997) interviewed 55 first time mothers and found that many of the women initially felt overwhelmed and unready for motherhood. They were bombarded with information and advice and felt they lacked the time and energy to fulfil their new role. Feelings of being drained and unready featured in the early stages of adjustment. However over time they began a process of 'working it out', gaining confidence and adapting to their new tasks.

Other studies have focused on specific areas of change. For example, some have investigated changing relationships, with many studies noting that marital relationships in particular are subject to adjustments after the birth of a child (Belsky et al 1983, Belsky et al 1990). For example MacDermid et al (1990) note how a couple's activities tend to become more child-orientated while the division of labour becomes more traditional. Martell (2001) notes how women who have

recently given birth can find new aspects to their existing relationships with their mother and mother-in-law, now having more in common and being “members of the same club” (p502). In terms of employment changes, many women also leave the labour force when they have a baby, although this may range considerably in duration (Macran et al 1996, Marshall 1999). Daily life also changes, and routines of baby feeding, care and sleeping come to structure the day (Martell, 2001). Changes also take place at a much more internal, psychological level, as a new mother comes to view herself in a different way. Focusing on self-identity in pregnancy, Bailey (1999) notes the dominant view that mothers should cast aside their ‘old self’ and assume the primary responsibility of being a mother. She found that the women she interviewed did retain some sense of continued self, but also that their sense of self was altered and they came to experience their lives differently. Mercer (2004) summarises that the transition to becoming a mother involves a wide range of transformations and disruptions, and that the maternal persona continues to develop and grow over time.

The new role of being a mother is therefore a time of considerable change and adaptation. However, attention will now turn to one area of change that has less often been the primary focus of studies concerning new motherhood; changes to sleep patterns that are likely to occur following the birth of a baby.

#### ***3.3.2. Sleep and motherhood***

Those adopting a sociological perspective of sleep have argued that one of the ways in which sleep can be understood from a sociological perspective is by examining the ways in which social roles impact upon sleep patterns and experiences. Venn et al (2008) note that advice for sleep disturbances often focuses on making behavioural or dietary changes, but largely ignores the impact

that social roles can have upon an individual's sleep quality. The transition to motherhood is a key time in the lifecourse where the association between social roles and sleep may come to the fore. Rather than a more medical focus on sleep 'disorders' as such, a social focus can instead be paid to how sleep patterns deviate from the norm due to social roles and expectations (Williams et al, 2010). Of the existing studies that do contain a focus on the sleep of new parents, evidence confirms the well-known argument that a baby has considerable impact upon sleeping, and therefore supports an association between social role changes and sleep changes. In particular, a new baby is associated with less sleep and more disrupted sleep (Lee et al 2000, Cottrell and Karraker 2002, Gay et al 2004, Hunter et al 2009). For example, Swain et al (1997) investigated the sleep patterns of women using sleep diaries, finding postpartum women reported more disturbed sleep than those who had not recently had a child, and that they also spent more time at night awake and were awake for longer periods of time.

There is evidently a strong tendency to focus on the sleep habits of new mothers only, as opposed to including fathers in the analysis too, with all the above mentioned studies focusing solely on mothers. This may be due to the assumption that mothers are more likely to engage in nighttime care and therefore that it is their sleep that is most affected. Existing studies from the sociology of sleep literature suggest this, noting the impact of women's caring roles upon their sleep habits. It has been suggested that mothers take on the more emotional and caring related aspects of family life and childcare, whilst fathers are often seen to assist the family in more 'practical' ways, such as the more physical tasks of home improvements or gardening (Venn et al, 2008). As a result of these gendered norms, childcare is much more likely to impinge on a mother's sleep. Bianchera and Arber (2007) conducted interviews with Italian



women aged between 40 and 80, and found caring to be a strong theme in their narratives about sleep. Caring for elderly relatives or young children was associated with poorer sleep quality, especially if the caring is particularly demanding. Using data from the UK Women's Sleep Survey, Arber et al (2007) found nighttime behaviour of children (eg. staying out late) to be associated with poorer sleep of women in mid-life. Hislop and Arber (2003) argue that the bedroom can be understood as an 'invisible workplace' (2003:702) where women continue to engage in unpaid physical and emotional labour to ensure the well-being and maintenance of their family unit. They argue that it is women who primarily engage in childcare at night, with sleep patterns reinforcing traditional family gender roles and responsibilities.

They theorise their findings in terms of Williams and Bendelow's (1998) sleep role theory. Williams and Bendelow (1998) have argued that sleep can be understood as a social role. Certain rights and duties are associated with this social role; there is the duty to sleep when socially acceptable and conform to socially agreed sleep times unless legitimate circumstances (such as work) prevent this, and also to sleep in a private place. The sleep role also carries the rights of being able to have freedom from disturbance and exemption from the obligations of normal roles. This release from normal roles and duties enables social activity to continue during the following day and society to function effectively. However, according to Hislop and Arber (2003), mothers give up their rights of the sleep role and are always considered as 'being available' and 'on duty' in their mothering role. The authors also note that this is generally passively accepted by the mothers, and that the decision to have children is synonymous with accepting ongoing sleep disturbances. Sleep disturbances are

seen as part of 'a woman's lot' and to seek to change this would be denying their gendered role as carers.

However, in contrast to these arguments, the one study located that does include new fathers finds that the sleep of new fathers also undergoes considerable change. Gay et al (2004) found that there was no gender difference in ratings of fatigue, and also that new fathers actually achieved less total sleep in a 24 hour period, than new mothers. This would suggest that rather than avoiding the sleep changes that occur, men are also affected, perhaps even more so as they may be less likely to be able to nap during the day if they have returned to employment.

Whilst many studies therefore appear to suggest that mothers are of primary importance when investigating sleep and caregiving, including fathers in the analysis would also be useful. Firstly, it would contribute to knowledge concerning new fatherhood, of which there is significantly less compared to new motherhood. Knowledge concerning motherhood would also be expanded upon, by enabling comparative insights with fathers. Furthermore, by investigating differences in sleep changes between mothers and fathers in the postpartum period, further information can be gained concerning gendered roles, expectations and duties. Do mothers take on the lion's share of sleep disturbances or is the experience of them more equal? Even if the mother is responsible for night care, is the father still sufficiently disturbed so that his sleep needs also go unmet? Previous studies that have suggested mothers tend to be the primary nighttime carers, have focused on those with older children, do differences exist when a baby is first born? An examination of these areas would therefore enable the view that it is the sleep of new mother's which is primarily impacted upon when a baby is born to be empirically tested, whilst

contributing to knowledge concerning motherhood, fatherhood, and the sociological nature of sleep.

#### ***3.3.3. Associations with well-being***

Sleep changes amongst new mothers may also be closely related to maternal well-being. Some level of distress has been described as a common maternal experience (Arendell, 2000). The transition to motherhood has been linked to depressed mood (O'Hara et al 1991, Cox et al 1993, Matthey et al 2000) with approximately 10% of new mothers developing clinical depression (Campbell et al, 1992). It has also been found that following the arrival of a baby, marital conflicts increase (Crohan, 1996) which may also have deleterious effects upon well-being. Certain risk factors may increase the chances of depression and distress occurring. Using the Edinburgh Postnatal Depression Scale, Warner et al (1996) found that the pregnancy being unplanned, not breastfeeding, and unemployment were all significant risk factors. Milgrom et al (2008) found that prior depression and lower support from the mother's partner were suggestive of depression. Other factors include feeling unready and unprepared (Rogan et al, 1997), difficulty affording childcare (Goldstein and Ross, 1989) and dissatisfaction with care during labour (Willinck and Cotton, 2004).

There have been fewer studies which have included a specific focus on how sleep changes may be associated with maternal well-being. Of those that do exist, results are mixed. Dennis and Ross (2005) found that mothers who scored higher on a depression scale were more likely to report that their baby woke more than 3 times in a night and that they got less than 6 hours sleep per 24 hours. Goyal et al (2009) found that less than 4 hours of sleep between midnight and 6am and less than a 60 minute nap during the day were related to depressive symptoms at 3 months postpartum. Sleep disturbances have also

been suggested as a risk factor for poorer maternal well-being elsewhere (Hiscock and Wake 2001, Lam et al 2003, Dennis and Ross 2005a, Bayer et al 2007) whilst successful efforts to improve a child's sleeping habits have been found to result in improved maternal mood levels (Armstrong et al, 1998). However Wolfson (2003) found that an increase in depressive symptoms following a baby's birth was associated with mothers who actually reported more total sleep time, as opposed to less.

Whilst the majority of these findings serve to highlight the pivotal role of sleep changes and their influence, there are however a number of under-explored areas that require further investigation. There is once again, a need to extend this research to take into account new fathers too. What differences exist between mothers and fathers when poor sleep is encountered? The sociological view that mothers are socially constructed as primary carers of children and are likely to experience the bulk of sleep disruptions, may be taken to suggest that it is only their well-being that is at risk. By including fathers in the analysis this claim can be tested.

Additionally, if mothers and fathers experience the sleep disruptions more equally, is one more resilient than the other and less likely to suffer poorer well-being? Focusing specifically on men and sleep, Meadows et al (2008) found that whilst men were aware of the functions and need for sleep, they also attach a lack of priority to it. Courtenay (2000) argues that the dismissal of sleep needs is tied to notions of masculinity, whereby a lack of regard for sleep signifies status and machismo. These findings may suggest that men cope better with sleep changes than women, by affording them less consideration and attention. Incorporating fathers into the analysis would therefore add to knowledge concerning sleep, well-being and gender.

Furthermore, an association between sleep and well-being is consistently found in the general population as well as amongst new parents, for example a lack of sleep has been noted as being a risk factor for depression (Ford and Cooper Patrick, 2001) and also lower physical health (Pilcher and Ott 1998, Dzaja et al 2005, Knutson 2013). It would therefore extend current knowledge to investigate whether associations differ between the two groups and their social context; do new parents experience greater declines when sleep quality is poor due to the constant nature of caring for a baby and the intense processes of change that are taking place? Or are they instead more resilient as it is coupled with the joy of having a new baby, or perhaps because the sleep changes were expected?

There is therefore a need to add to existing knowledge concerning sleep and well-being, but also to empirically test ideas concerning gendered norms of parenting, gendered approaches towards sleep, and also the social context concerning sleep changes.

#### ***3.3.4. Methodological considerations***

A more qualitative exploration would also be of use to reveal information concerning how sleep changes are ‘experienced’ and therefore capturing the more subjective aspects of sleep that can also be seen as important, such as normative expectations of sleep, how tiredness is experienced, and the ‘doing’ of sleep in relation to social roles and responsibilities (Williams et al, 2010). Whilst qualitative methods have been used in some of the sleep studies previously mentioned (Hislop and Arber 2003, Bianchera and Arber 2007) these have focused only on sleep patterns and not on associations with well-being. Qualitative insights could therefore go beyond statistical patterns and prevalence rates, and yield information concerning the understandings and

meanings new mothers attach to their experience of sleep changes, how they are coped with and made sense of, and the impact upon their daily lives.

#### *3.3.5. Demographic differences*

A further consideration is that mothers are not a homogenous group and therefore current findings could be extended by taking into account different demographic factors such as partnership status and age, and how these relate to associations between sleep and well-being. There is a lack of research which looks at demographic differences in coping with sleep changes, however there is a considerable amount that looks at different levels of risk of postpartum depression, which may be used to indicate heightened vulnerability. It has previously been found that being single is a risk factor for postpartum depressions (Pfof et al 1990, Kiernan and Pickett 2006). Factors such as more financial hardship and lower levels of social support have been proposed to account for these differences. These findings suggest therefore that single mothers may be a particularly vulnerable subgroup of new mothers, and therefore the potentially negative effects of poor sleep upon well-being may be heightened.

However other studies have not found evidence of marital status being related to maternal well-being (Warner et al 1996, Eberhad-Gran et al 2002). There are a number of reasons why this might be the case. Firstly, a single mother may be less susceptible to role strain, whereas a married mother may struggle to meet the role demands of both mother and wife. Furthermore, a single mother may still have a strong family network living close by which aid in coping with the new baby and perhaps help financially. However, this may differ in the context of coping with sleep, as it will likely be the mother herself who is predominantly dealing with nighttime care.

Associations may also differ by the age of the mother. Some studies have found that younger mothers are more vulnerable to poorer well-being (Deal and Holt 1988, Reck et al 2008). This may be because of lower education levels, less financial security, and less social support, and would suggest that younger mothers may cope less well with sleep changes. However others have found that age is not related to postpartum depression (Gotlib et al 1989, Warner et al 1996, Eberhard-Gran et al 2002, Leigh and Milgrom 2008), suggesting that there may be no difference in the effect of sleep changes upon well-being amongst older and younger mothers.

The effects of age and marital status upon the association between motherhood and well-being is therefore unclear, with mixed results and competing arguments. Furthermore, they have not been investigated specifically in relation to coping with sleep changes, and therefore little is known about subgroups of mothers who may be either more vulnerable or resilient when a poorer standard of sleep is experienced.

#### ***3.3.6. Summary and emerging hypotheses:***

A sociological perspective of sleep draws attention to the impact of social roles upon sleeping patterns, and how power, status and gender may shape sleep. One such social role change that is likely to be strongly associated with changes to sleep is the transition to motherhood.

Sleep can also be seen as having social significance as it is associated with societal well-being and quality of life. The early days of motherhood are a time when well-being levels may come under threat, and the associated sleep changes are likely to be closely related to maternal well-being and the risk of postpartum depression.

Existing studies have shown that a new baby often significantly impacts upon a mother's sleep, and that this can have negative effects upon well-being. However there are a number of ways in which these current findings can be extended. Firstly, there is a need to include new fathers in the analysis to enable comparisons to be made and further test how gendered norms of parenting impact upon sleep. Furthermore, associations between sleep and well-being can be compared between new parents and non parents to ascertain how results differ according to the social context. It is also argued that both qualitative and quantitative methodologies can be used to capture both the subjective and objective aspects of sleep. Finally, new mothers can be recognised as a diverse groups and the potentially moderating effects of marital status and age can be investigated to further understandings of subgroups that may be at heightened vulnerability to poorer well-being when sleep is disturbed.

Based upon this review of the current literature, the following hypotheses can be made;

- Mothers of a young child will report a shorter sleep duration and poorer sleep quality than those who do not have a young child
- That differences will exist between mothers and fathers, with mother reporting less sleep duration and poorer quality sleep
- That poorer sleep will be associated with poorer well-being
- That differences in the association between sleep and well-being will vary between mothers and fathers, with mothers reporting lower well-being
- That differences in the association between sleep and well-being will vary between new parents and non- parents
- That differences in the association between sleep and well-being will vary between mothers of differing demographic characteristics



Furthermore, a qualitative approach will explore the following areas;

- How are sleep changes experienced at a more subjective level?
- How do new mothers cope with and make sense of the sleep changes?
- What perceptions and meanings are attached to the sleep changes?

## 3.4. Methodology

### *3.4.1. Quantitative methodology*

The quantitative data is obtained from ‘Understanding Society’, a large scale panel survey which features a number of questions concerning social and economic characteristics, attitudes and behaviours from members of 40,000 households across the UK. Data is collected annually from the same sample. All members of the household that are aged 10 or over take part in the survey, with those aged between 10 and 15 having their own self completion questionnaire. It is a continuation of the British Household Panel Survey which ran from 1991 to 2008, and data from this is integrated into Understanding Society.

For the purpose of this study, only data from Wave 1 of Understanding Society is used, as this wave features the necessary and relevant questions relating to sleep. The key variables used in the analysis will now be described;

#### *Parent of 0-2 year old*

This is a generated variable that captures all those who have 1 child only, that is aged between 0 and 2 years old. Firstly all those who had children were selected using a question which asks how many of your own children are living in your household. All those who had just one child were then kept, and then all those whose child was aged between 0-2 was kept by using an existing item in the survey which specifically asks about the child’s age. This formed a dummy variable whereby parents who had one child under 2 were the category of

interest. The reference category was coded so that it was all those who had no children under 16 living in the household. All those in either category that were aged over 65 were then dropped. It resulted in 1875 observations of parents to a 0-2 year old, of which 1090 were mothers and 765 were fathers.

### *Sleep measures*

There are two items in the survey that are used to measure sleep. The first item asks how many hours of actual sleep did the respondent tend to have each night over the last month. This is described as ‘sleep duration’ in the results and analysis. The second item used is an item that asks ‘During the past month, how would you rate your sleep quality overall?’. This is referred to as ‘sleep quality’. These two items were chosen as it is thought they would capture differing aspects of the sleep experience. For example, a person may have a fairly long sleep duration overall, but if waking frequently then the sleep quality may be evaluated as poor. Whilst in many cases the two measures are likely to be correlated, it was thought it would be interesting and informative to see if any differing results are obtained from the two measures, thus enabling some understanding of the different facets of sleep.

### *Well-being measures*

Two measures of well-being are used. The first is the General Health Questionnaire (GHQ) score. The GHQ contains a range of questions related to the respondents current state of mental health, and can be used to screen for minor psychiatric disorders. The 12 questions relate to the areas of concentration, worry, feelings of usefulness, decision making ability, strain, ability to overcome difficulties, enjoyment, ability to face problems, feelings of unhappiness, confidence, self-worth and general happiness. For each question the respondent asks how often they have been feeling this way, and the answer

is on a 4 point scale, and the overall score from all items can be used as a measure of well-being.

Within Understanding Society, two versions are available, the GHQ-12 and the GHQ-36. The GHQ-12 condenses the 4 point scale into a 2 point scale (original options of 1 and 2 become 1, and 3 and 4 become 2). For this piece of research, the GHQ-36 has been used which keeps the original scale, however although not reported, the GHQ-12 was also used for comparative purposes, and the same pattern of results was obtained. Studies using these measures of well-being have also suggested both versions have similar screening properties and produce valid results (Bandyopadhyay et al 1988, Holi et al 2003). Many studies using the GHQ have constructed it as a dummy variable with a cut-off point for those at risk of a minor psychiatric disorder. As this paper is concerned with general trends in overall well-being rather than actual psychiatric disorders, it has been kept as a interval level variable.

The second measure of well-being used is the respondent's life satisfaction score. Upon being asked how satisfied with their life overall they are, the respondent can choose from a 7 point scale ranging from 'completely dissatisfied' to 'completely satisfied'. This measure was also kept as a interval level variable. Such a measure of well-being is thought to capture the more cognitive and judgemental aspects, as opposed to the more affective (Diener et al,1985). It is a highly subjective measure; how an individual judges their own life and by what standards will vary from person to person (Diener et al,1985). Alongside satisfaction with specific life domains (health, work etc), positive affect and negative affect, it is seen as a core component of subjective well-being (Diener,2000). It was therefore decided to include this measure alongside the GHQ, as although correlated, it may capture a different aspect to well-being.

### ***3.4.2. Control variables***

In the regression models, the following covariates are included.

#### ***Partnership status***

A dummy variable created from the ‘marital status’ item in the data set. Comparing those who are married or cohabiting to those who are not, and are instead either divorced, widowed, separated or single.

#### ***Employment status***

Existing item which asks respondent if they are in paid employment.

#### ***Age***

Age of the respondent.

#### ***Income***

Monthly income, which is then equivalised to adjust for household size and composition.

#### ***Household size***

Number of people in household.

#### ***Health***

Item which asks respondent if they have any long standing illness, impairment or disability.

#### ***Gender***

Gender of respondent, coded as 1 for females.

#### ***Ethnicity***

Respondent is asked what their ethnic group is, all those who select british/English/Scottish/welsh/northern irish are coded as 1, with other groups coded as 0.

***Educational status***

Respondent is asked for their highest educational qualification, and a dummy variable is created which compares all those who have a degree or higher qualification to those who have a lower level qualification.

***3.4.3. Analytical Methods***

Descriptive statistics are generated from cross tabulations and comparisons of means. T-tests are used to ascertain whether differences between means are statistically significant (the difference between the means divided by the standard error of the difference between the means).

OLS regression models are used, and results are presented for pooled groups, and also for split groups i.e. for mothers and fathers separately. This allows a comparison of effects between groups of interest. Types of regression models more commonly used with panel data, such as a fixed effects model, were not used in this chapter as only one wave of Understanding Society is analysed, and the study is therefore cross sectional. Dependent variables are continuous and therefore logistic regressions were also not suitable.

The number of observations within different parts of the analysis do differ. For example, numbers are lower in the regression models than in the descriptive analysis. As has been discussed in other chapters, this is due to item missingness within the variables included in the models. At times, responses may be missing, for example due to a respondent missing that question or the question not occurring at all in a certain wave. When this occurs, observations are lost from the models. There is therefore a trade off between controlling for a factor deemed important to the model, yet potentially losing some observations. When constructing the models, this is considered, and if the inclusion of a variable reduces the number of observations drastically and if not deemed

essential, then it may be excluded to enable the number of observations to remain high enough for analysis to remain as robust as possible.

#### ***3.4.4. Qualitative methodology***

The qualitative part of this study is based upon a secondary analysis of a previously collected set of interviews. The data set 'Becoming A Mother' is used, which was originally collected by a team headed by Wendy Hollway, between 2005 and 2007. It aimed to obtain information regarding the experience of first time motherhood. It was acquired via the ESDS Qualidata service which contains a wide range of archived qualitative data sets suitable for reuse.

This data set consisted of 35 interviews from 13 women. All women were first time mothers and living in the Tower Hamlets area of London. 3 of these were aged between 16-20, 9 were aged between 21-30 and 1 was aged 31. The sample was also ethnically diverse with 7 of the women stating themselves as British Bangladeshi, 4 being white British, and 2 being African. 7 of the women were categorised as working class and 6 as middle class, with the researchers basing class categories mainly on educational qualifications.

Initially it had been planned to have a larger sample size, however it was decided to lower the number of women interviewed in order to enable more follow up interviews and thus extend the longitudinal element of the study. The aim was to women interview the women at three different time points. It was the aim for the first interview to take place during the final trimester of pregnancy, however in seven cases the women gave birth before this interview took place and therefore it was conducted shortly afterwards. The aim was for the second interview to take place at approximately 4 months postpartum and the third at approximately 12 months postpartum. However due to losing contact with some of the women, and in some cases the baby being born before the 1<sup>st</sup> interview

could take place, achieving the three separate interviews was not always possible. One woman was only interviewed once, and two women were interviewed only twice. This resulted in 35 interviews overall, with 10 of the participant being interviewed on all three occasions. The follow up interviews were guided by the previous ones, with topics and directions that arose being pursued again; therefore the interviews proceeded in an individualised manner for each respondent.

The interviews followed the free association narrative interview method (Holloway and Jefferson, 2000). This method seeks to use few pre-set questions and as many open questions as possible in order to be flexible and responsive to the respondent. The aim is to elicit stories from the respondent and allow the interview to be shaped by the information given and the areas and issues they highlight.

There were some key areas of inquiry for the interviews, which differed by the timing of the interview. In the first, the focus was on how the women's pregnancy had been experienced and preparations for the birth. The second interview consisted of questions relating to how the early stages of motherhood were being experienced, for example how the baby was feeding and sleeping and sources of help. The final interview continued to ask questions relating to the experience of motherhood, hopes for the future and also some reflection upon the previous year. The key areas that the researchers hoped to emerge from the interviews were:

- The relationship between motherhood and other identities such as ethnic group membership, age, class, and being a daughter/sister/wife
- Meaning of presence of a partner and nature of partner relationship
- Relationship with mother, parents and other family members

- Sources and nature of support
- Sources and nature of difficulty
- The day to day experience of mothering

For the purpose of this secondary use of the data, the issue of ‘sources and nature of difficulty’ and ‘the day to day experience of mothering’ are of chief interest via a more refined focus on the topic of changes to sleep patterns and sleep quality and their impact upon well-being and the transition to becoming a mother.

The interviews were analysed using thematic analysis. This method uses the basic systematic features of content analysis in terms of exploring the data, but in addition to noting the frequency of certain words or phrases, also aims to pay attention to their meaning and context (Joffe and Yardley, 2004, Ezzy 2002) and focuses on describing both implicit and explicit ideas that exist within the data (Guest et al,2012). Whilst a general issue of interest was pre-determined (sleep), the meanings and associated sub-topics surrounding this were interpreted from the data and emerged throughout the analysis in an open and flexible manner. Analysis was conducted manually to begin with. Transcripts were read through thoroughly in order to become familiar with the data. Upon a subsequent reading, brief notes and verbal descriptions were applied to small sub-sections of the data which were deemed of relevance. As this progressed, parts of the highlighted text emerged to fit together and form sub themes around the overall theme of sleep. Change and adjustment was frequent as the analysis continued. The computer program NVivo was then used to provide further analysis including keyword searches, investigations into clusters of similar categories and the mapping of connections between themes.

There is a considerable degree of debate concerning the secondary analysis of qualitative data (Heaton, 2008), with a number of points of criticism of the



method and a complementary set of counter-criticisms which point towards the opportunities and possibilities that this method holds. I have included a lengthy discussion of these points, and their specific applications to the ‘Becoming a Mother’ data set in particular, in the appendix.

### 3.5. Results

#### *3.5.1. What are the typical sleeping patterns of new mothers?*

##### *Do they differ from new fathers?*

The quantitative analysis enabled an investigation into patterns concerning sleep duration and sleep quality of new mothers, and allowed for comparisons with new fathers, and those who do not have any children in the household.

Table 3-1 presents the average sleep duration of these groups of interest. The pooled group of parents to a 0-2 year old (both mothers and fathers) report a slightly lower average than those without children, and when this group is separated by gender, it can be seen that the fathers report a lower average sleep duration than mothers, 6.77 hours compared to 7.02 hours respectively. These values are both slightly lower than men and women who do not have children in their households. Overall therefore these results suggest lower sleep durations for those who are parents to a toddler, and with lower durations for fathers than mothers.

TABLE 3-1 MEAN SLEEP DURATION

	Parent of toddler	No children in household
Mean hours slept (pooled men and women)	6.92 (n=1433)	7.04 (n=17409)
Mean hours slept (men only)	6.77 (n=579)	7.02 (n=8225)
Mean hours slept (women only)	7.02 (n=854)	7.06 (n=9184)

Table 3-2 presents an overview of self assessed sleep quality, comparing the groups of interest. A lower number of the pooled group of parents report their sleep as ‘very good’ compared to those without children in the household. Of

these, less mothers rate their sleep in this category, with only 15.76% of them describing their sleep as 'very good' compared to 17.91% of fathers. These are both considerably lower than the 23.86% of people with no children in the household who rate their sleep as 'very good'. The vast majority of all the groups of interest rated their sleep as fairly good, particularly in the case of fathers.

A higher number of mothers than fathers rated their sleep in the most negative categories, with 30.3% of mothers compared to 21.36% of fathers describing their sleep quality as either 'fairly bad' or 'very bad'. Of these, 4.88% of women evaluate their sleep as 'very bad', compared to 2.03% of fathers. A lower percentage of fathers actually rate their sleep in this category than those who do have not children in the household, suggesting that other reasons for poorer sleep have considerable influence.

TABLE 3-2 SELF EVALUATIONS OF SLEEP QUALITY

	Parent of toddler (pooled)	Parent of toddler, fathers only	Parent of toddler, mothers only	No children in household (n=18174)
Very good	16.61%	17.91%	15.76%	23.86%
Fairly good	56.60%	60.64%	53.94%	52.75%
Fairly bad	23.04%	19.43%	25.42%	18.53%
Very bad	3.75%	2.03%	4.88%	4.86%

The impact of a new baby upon sleeping habits is also strongly alluded to in the interview data. Although distinctions are not made between sleep quality and sleep duration and the data is restricted to mothers only, the various ways that sleep is negatively affected are described. Difficulties such as night wakings, struggling to settle the baby to sleep, and rising early were all commonly mentioned by the participants, and can be understood as potential reasons behind a poorer quality of sleep and sleep of a shorter duration.

To further understandings of the sleep patterns of new parents, and how results vary between mothers and fathers, OLS regression models were run. Table 3-3 shows the results of a model in which the dependent variable is sleep duration.

The independent variable of primary interest is ‘being a parent to a 0-2 year old’, which compares all those who have one child in the household that is aged between 0-2, to those that do not have any children in the household. Parents that have older children also in the household are excluded as the key focus of this research is first time parents. Column 1 refers to a pooled sample of men and women, whilst columns 2 and 3 feature men and women separately.

TABLE 3-3 REGRESSION MODEL WITH SLEEP DURATION AS DEPENDENT VARIABLE

	Pooled (men and women)	Men only	Women only
Parent to 0-2 year old	-.230 ***	-.281 ***	-.184 **
Has partner	-.068**	-.056	-.075 **
Is employed	-.273 ***	-.376 ***	-.191 ***
Age	-.003 ***	-.002 **	-.003***
Income	1.28	1.41	1.15
Household size	.102 ***	.095 ***	.106 ***
No health problems	.454 ***	.408 ***	.465***
Female	.041		
British ethnicity	.030	-.013	.067
Has degree	-.027	-.014	-.050
R squared	0.21	0.16	0.24
N	21259	10030	11499

Being a parent to a 0-2 year old is associated with a decline in sleep duration ( $b=-0.230$ ,  $p=0.000$ ). The effect remains when a range of other individual and household characteristics are controlled for. This effect remains significant and negative when considering men and women separately, though a larger effect for men is noted. Being a father of 0-2 year old is therefore associated with a greater decline in sleep duration than that of being a mother to a 0-2 year old, with an effect size of  $-0.281$  ( $p=0.000$ ) for fathers, and  $-0.184$  ( $p=0.003$ ) for mothers. This difference is also statistically significant ( $p=0.048$ )

Of the control variables, having a partner is associated with less sleep but for women only ( $b=-0.075$ ,  $p=0.046$ ). Being employed is associated with less sleep for both men ( $b=0.376$ ,  $p=0.000$ ) and women ( $b=-0.191$ ,  $p=0.000$ ) and it can be seen that sleep duration declines with age for men ( $b=-0.002$ ,  $p=0.012$ ) and women ( $b=-0.003$ ,  $p=0.000$ ). Sleep duration increases with larger household sizes for both

men and women ( $b=0.095$ ,  $p=0.000$ ,  $b=0.106$ ,  $p=0.000$ ) and also with the absence of health problems ( $b=0.408$ ,  $p=0.000$ ,  $b=0.465$ ,  $p=0.000$ ).

Table 3-4 present the results when self-assessed sleep quality was used as the dependent variable, with higher values indicating better sleep quality:

	Pooled (men and women)	Men	Women
Parent to 0-2 year old	-.166 ***	-.168 ***	-.171 ***
Has partner	.052***	.069***	.036 **
Is employed	.097 ***	.097 ***	.092 ***
Age	.003 ***	.002 ***	.001***
Income	1.98	1.75 *	.000
Household size	.011 **	.016 **	.009 **
No health problems	.372***	.324 ***	.415***
Female	-.106 ***		
British ethnicity	-.076***	-.070	-.083
Has degree	.058 **	.027	.084
R squared	0.18	0.14	0.20
N	22470	10386	12064

Being a parent to a 0-2 year old is associated with lower sleep quality ( $b=-0.166$ ,  $p=0.000$ ). When the regression model is run separately for men and women, a slightly larger effect is witnessed for women ( $b=-0.171$ ,  $p=0.000$ ), compared to men ( $b=-0.168$ ,  $p=0.000$ ), which is in contrast to the previous models featuring sleep duration, where greater declines were found for men. However the differences in effect sizes is very small in the case of sleep quality and not statistically significant.

Of the control variables, having no health problems was related to better sleep quality for both men and women ( $b=0.324$ ,  $p=0.000$ ,  $b=0.415$ ,  $p=0.000$ ) as was a larger household size ( $b=0.016$ ,  $p=0.008$ ,  $b=0.009$ ,  $p=0.023$ ). Having a partner is positively related to sleep quality for both men and women ( $b=0.069$ ,  $p=0.000$ ,  $b=0.036$   $p=0.021$ ), unlike in the case of sleep duration where it was negatively related and for women only. Whilst having a partner may therefore have no effect on sleep duration, or perhaps a negative one in the case for women, those who have a partner would appear to have a better quality of sleep than those without. This difference in effects for sleep duration and sleep quality is also

witnessed for the employment variable, with it being positively related to sleep quality for men and women ( $b=0.097$ ,  $p=0.000$ ,  $b=0.092$ ,  $p=0.000$ ), whereas it was negatively related to sleep duration. Furthermore, whilst sleep duration was seen to decline with age, sleep quality increases ( $b=0.002$ ,  $p=0.000$ ,  $b=0.001$ ,  $p=0.000$ ).

This reflects the differences between sleep duration and quality; sleeping for a shorter duration does not necessarily equate to a poorer quality of sleep. For example in the case of employment, an employed person may sleep for a shorter duration than an unemployed person (coming home from work late, having to rise earlier in the morning to get to work), yet may be so tired from the day that they sleep more deeply, and hence report a better quality of sleep. Conversely, an unemployed person may be able to sleep for a long duration (not have to get up early for work in the morning) but may be troubled by economic concerns and have a restless night, and therefore report a poorer sleep quality.

To summarise, this first part of the analysis investigated the sleeping patterns of new mothers, and also whether there were differences between these and those of new fathers. It has been found that parents in general report less sleep duration and lower sleep quality than those who do not have children in the household. The interview data additionally suggests various reasons why this may be the case. Fathers appear to report lower sleep duration than mothers, where as there are some tentative indications that mothers report poorer sleep quality. This is in contrast to the argument that it is the mother's sleep which is primarily affected by having a baby, and instead points to significant effects for fathers also. Many of the control variables also react differently according to whether sleep duration or sleep quality is being investigated, suggesting that these two measures capture different aspects of sleep.

***3.5.2. What is the association between sleep patterns and the well-being of new mothers? Do the associations differ to new fathers and those without children?***

It can further be investigated whether sleep duration and quality are associated with well-being levels. It is also of interest whether this differs between mothers and fathers, and between those with a child and those without. The well-being measures used are the 36 point GHQ scale and also the 7 point self assessed life satisfaction score.

Table 3-5 presents some descriptive statistics concerning the mean GHQ scores of mothers, fathers and those who have no children in the household, depending on sleep duration and quality. Higher scores indicate higher well-being.

TABLE 3-5 MEAN GHQ SCORES BY PARENTAL STATUS AND SLEEP MEASURES

	No children in household	Parent to 0-2 year old,	Parent who rate sleep as very bad	Parent who rate sleep as very good	Parent who report <= 6 hours sleep	Parent who report >6 hours sleep
Mean GHQ score (women)	24.2 (n=11174)	25.1 (n=895)	19.4 (n=44)	28.0 (n=141)	23.8 (n=302)	25.8 (n=593)
Mean GHQ score (men)	25.3 (n=9857)	25.9 (n=589)	20.2 (n=12)	28.2 (n=106)	24.4 (n=234)	26.8 (n=355)

Focusing firstly on the top row, which relates to women only, it can be seen that mothers of a 0-2 year old have a higher mean score than those who are not parents. However results differ when comparisons are made between those who report different sleep experiences. Mothers who report 6 or less hours sleep have a lower mean GHQ score than those who report more than 6 hours sleep, with a score of 23.8 compared to 25.8. There is also a considerable difference between those who report their sleep to be very good and those who report it to be very bad, with those who evaluate their sleep most negatively having a mean score of 19.4, which is 8.6 points lower than those who choose the most positive option, who have a score of 28.0.

Comparisons can also be made between the mean GHQ scores of mothers and fathers. Not taking sleep experiences into account, fathers have a higher mean score of 25.9, compared to the score for mothers which is 25.1. There is a similar difference between fathers who report less or more than 6 hours sleep as there was for mothers, and also between those who report their sleep as very bad or very good. However, fathers have a higher mean score than mothers in all cases. Those fathers who have less than or equal to 6 hours sleep have a mean score of 24.4, which is 0.8 points higher than the mothers. The fathers who rate their sleep as very bad have a higher mean GHQ score than mothers who also do, by 0.8 points again. Therefore whilst the pattern of poorer sleep and lower well-being remains, mean GHQ scores are higher amongst fathers than mothers.

Table 3-6 features mean life satisfaction scores:

	No children in household	Parent to 0-2 year old	Parent who rate sleep as very bad	Parent who rate sleep as very good	Parent who report <= 6 hours sleep	Parent who report >6 hours sleep
Mean life satisfaction score (women)	5.24 (n=11170)	5.38 (n=896)	4.81 (n=44)	5.72 (n=142)	5.24 (n=303)	5.46 (n=593)
Mean life satisfaction score (men)	5.17 (n=9795)	5.24 (n=587)	4.50 (n=12)	5.55 (n=103)	5.00 (n=234)	5.40 (n=353)

As was the case with GHQ scores, the mean life satisfaction scores are higher amongst the parents. When comparison are made by different sleep experiences, it can be seen that mothers who rate their sleep as very bad have a lower score than those who rate their sleep as very good, by a difference of 0.91. Those mothers who report longer sleep duration have a mean score of 5.46, compared to the lower score for those who report a shorter duration, of 5.24.

These differences can also be seen amongst the fathers. Those who rate their sleep as very good have a mean score of 5.55, compared to 4.50 amongst those

who rate it as very bad. Those who report more than 6 hours sleep have a score of 5.40, which is 0.40 points higher than those who report 6 or less hours sleep.

In contrast to mean GHQ scores, higher mean scores are evident for mothers than fathers. Differing aspects of overall well-being – as captured by the GHQ score and the life satisfaction score – may therefore interact with gender in particular ways whereby mothers experience declines in GHQ scores where as fathers are more likely to evaluate their life satisfaction more negatively.

Having examined some descriptive statistics relating to sleep and well-being, Table 3-7 presents OLS regressions investigating effects upon well-being levels of sleep habits. The sleep habit variables (sleep duration and sleep quality) have been coded so the effect of poorer sleep (less duration and poorer quality) is captured. The models compare the pooled group of parents (both mothers and fathers) to those with no children in the household. The first two columns show the results when GHQ scores are the dependent variable, and the next two columns have life satisfaction as the dependent variable.

TABLE 3-7 REGRESSION MODEL SLEEP AND WELL-BEING

	GHQ Score		Life satisfaction score	
	Parent to 0-2 year old	No children in household	Parent to 0-2 year old	No children in household
Less hours slept	-.172 **	-.173***	-.020 **	-.037 ***
Worse sleep quality	-2.52 ***	-3.32***	-.300 ***	-.534 ***
Has partner	.371	-.062	.445 ***	.183 ***
Is employed	.424 **	1.02***	.104	.026
Age	.024	.009 ***	-.044	.005
Income	.001	.000	.000	.000
Household size	-.158	.226	-.067	.046
No health problems	1.69 ***	1.65 ***	.394 ***	.438 ***
Female	-.147	-.667	.281	.126
British ethnicity	.631 **	.163	.373 ***	.193 ***
Has degree	-.027	-.095	.051	.035
N	1408	16935	1408	19747

The first two columns show the associations between the covariates with GHQ scores. Amongst the parents, both sleep measures have a significant and negative effect upon GHQ scores. Less sleep duration is associated with a decline in score of 0.172 ( $p=0.035$ ), whilst poorer sleep quality is associated with



a decline of  $-2.52$  ( $p=0.000$ ). The effect of less sleep duration has a very similar sized effect amongst the non-parents group, although the effect of less sleep quality is larger ( $b=-3.32$ ,  $p=0.000$ ). This difference is also statistically significant ( $p=0.021$ ). This larger negative effect for those without children in the household may suggest that whilst sleep changes resulting from a new baby can negatively affect well-being, sleep changes that stem from other reasons can carry more risk.

Some of the effects upon well-being of the control variables also differ between the two groups. In the case of the parents, the only other covariates that are significantly associated with well-being were having no health problems ( $b=1.69$ ,  $p=0.000$ ) and being of British ethnicity ( $b=0.631$ ,  $p=0.014$ ). However amongst the non parents group, in addition to having no health problems ( $b=1.65$ ,  $p=0.000$ ), employment status was also associated with improved well-being ( $b=1.02$ ,  $p=0.000$ ), as was age ( $b=0.0009$ ,  $p=0.000$ ). Also of interest, is that being of British ethnicity is not significant for non-parents, and therefore the positive effect of this upon well-being is witnessed only for parents. It therefore appear that some difference exists between parents and non parents In terms of what is associated with their well-being.

When life satisfaction is the dependent variable, less sleep duration is negatively related to life satisfaction amongst the parents ( $b=-0.020$ ,  $p=0.047$ ) and the non parents group ( $b=-0.037$ ,  $p=0.000$ ), although this difference in effect size is not statistically significant. The effect of poorer sleep quality is significant for the parents group, and it is again negatively related ( $b=-0.300$ ,  $p=0.000$ ). As was the case in the previous models, the effect is larger amongst the non-parents group, where a decline of  $-0.534$  ( $p=0.000$ ) is found. This difference in effect sizes is also statistically significant ( $p=0.000$ ), denoting that this larger effect

witnessed for the non parental group could not have occurred by chance. This again suggests that the impact upon well-being of sleep changes is not as large when the changes occur after the birth of a baby, than for other reasons. It may be that the more positive aspects of having a baby help ‘protect’ the well-being of new parents from the potential effects of poorer sleep.

In terms of the other covariates, having a partner is positively associated with life satisfaction scores for both groups, although a larger effect is seen for parents ( $b=0.445$ ,  $p=0.000$ ) than for those without children in the household ( $b=0.183$ ,  $p=0.000$ ). This may be due to the increased need for support from a partner when children are in the household. Having no health problems is also associated with improved life satisfaction for the parents group ( $b=0.394$ ,  $p=0.000$ ) and for the non parental group ( $b=0.438$ ,  $p=0.000$ ).

Table 3-8 shows the results when mothers and fathers are investigated separately, with GHQ scores as the dependent variable;

	Mum to 0-2 year old	Dad to 0-2 year old	Women with no children in household	Men with no children in household
Less hours duration	-.041	-.377**	-.158***	-.198 ***
Poorer sleep quality	-2.59 ***	-2.46***	-3.35***	-3.27 ***
Has partner	.450	-.648	.203	-.374 **
Is employed	.035	1.76**	.822 ***	1.31 ***
Age	-.212	-.069	.013 ***	.003
Income	.002	.000 *	.000	.000 *
Household size	-.171	-.148	.208 ***	.258 ***
No health problems	1.93 ***	1.19***	1.62 ***	1.65 ***
Has degree	.263	-.448	.103	-.301
N	839	569	10469	9336

For mothers, sleep duration is not significantly related to their GHQ scores, however a large and significant effect is evident for sleep quality, with poorer sleep quality being associated with a decline in GHQ score ( $b=-2.59$ ,  $p=0.000$ ). This is in contrast to fathers, where both sleep measures display a significant effect. A gender difference therefore exists, with sleep duration being of

importance to father's well-being only. Mothers therefore appear to be sensitive to the quality of their sleep only.

It is possible that this may not be specific to parenting; that is, that females who were not mothers also displayed the same pattern of results. Therefore further regression models were run to investigate this. The results found that both sleep duration and quality were of importance to females who did not have children in the household. Therefore duration not being associated with GHQ scores was specific to mothers only, suggesting that there is something specific for this life stage and social role. Running these extra regressions additionally shows that declines due to poorer sleep quality are also larger amongst the non-parents category.

Of the control variables, many are no longer significant when the models focus on the parents and are split by gender. Having no health problems remains positively associated with well-being for both mothers and fathers ( $b=1.93$   $p=0.000$ ,  $b=1.19$   $p=0.000$ ). Being employed is significant for fathers, being associated with higher well-being ( $b=1.76$ ,  $p=0.013$ ). There is therefore some evidence of a father gaining a sense of positive well-being from being employed, suggesting the fulfilment of a male breadwinner social role is beneficial for fathers.

Table 3-9 shows the results when life satisfaction is the dependent variable;

TABLE 3-9 SLEEP AND LIFE SATISFACTION, BY GENDER AND PARENT STATUS

	Mum to 0-2 year old (n=)	Dad to 0-2 year old (n=)	Women with no children in household (n=)	Men with no children in household (n=)
Less hours slept	-.015	-.087**	-.017**	-.066***
Worse sleep quality	-.308 ***	-.300***	-.552***	-.536 ***
Has partner	.419 **	-.634	.237 ***	.119 ***
Is employed	.049	.503**	-.029	.108 ***
Age	-.035	-.042	.005 ***	.004 ***
Income	.000	.000 *	.000	.000 *
Household size	-.035	-.283	.041 **	.053 ***
No health problems	.461 ***	.148***	.429***	.442 ***
Has degree	.136	-.114	.071 **	.002
N	840	568	10469	9278

The same patterns relating to gender and the sleep variables can be witnessed when investigating life satisfaction scores. Amongst the parents, sleep duration is not significant for mothers, but is significant and negative for fathers ( $b=-0.087$ ,  $p=0.013$ ). Poorer sleep quality is significantly associated with life satisfaction scores for both mothers and fathers, with a similar size effect for mothers ( $b=-0.308$ ,  $p=0.000$ ) as for fathers ( $b=-0.300$ ,  $p=0.000$ ). To ascertain whether this is simply a gender effect or something related to the parenting role, results were also obtained for the non parents group, as can be seen in columns 3 and 4. Sleep duration is significantly related to life satisfaction score for females here, suggesting that it is something specific to mothers with a young child. Also bearing similarity to the GHQ models, it can also be seen that declines due to poorer sleep quality are also larger amongst the non-parents category.

Of the control variables, having a partner was positively related to life satisfaction for mothers only ( $b=0.419$ ,  $p=0.035$ ) where as being employed was positively related for fathers only ( $b=0.503$ ,  $p=0.009$ ). Having no health problems was associated with improved life satisfaction for both mothers ( $b=0.461$ ,  $p=0.000$ ) and fathers ( $b=0.148$ ,  $p=0.000$ ).

To summarise, the analysis points to the potential negative effect of poorer sleep upon well-being. Less sleep duration and poorer sleep quality were related to lower well-being for parents, although when mothers were investigated separately from fathers, only sleep quality was significantly associated with well-

being. The negative effects upon well-being were actually larger for those without children in the household.

### *3.5.3. How do associations between sleep and well-being vary between mothers of different social and demographic characteristics?*

Whilst comparisons have been made between parents and non parents, and also between mothers and fathers, within-group differences between mothers are also of interest. The regression models were therefore run separately for the following sub samples; the oldest mothers and the youngest, mothers with a partner and those without, mothers of british ethnicity and those of non-british ethnicity, and those with a degree and those without.

#### *Age*

Table 3-10 shows the mean well-being values for the youngest and oldest subgroups of mothers. The mean GHQ score and life satisfaction score is higher for the older groups of mothers, indicating higher well-being for this subgroup.

TABLE 3-10 MEAN GHQ SCORE BY MATERNAL AGE

	Mean GHQ score	Mean life satisfaction score
Mum aged 16-25	24.5 (n=300)	5.24 (n=299)
Mum aged 36-55	25.1 (n=130)	5.35 (n=131)

Table 3-11 displays the results from the regression models that compares the younger mothers (those ages between 16 and 25) and the oldest (those aged between 36 and 55).

TABLE 3-11 SLEEP AND WELL-BEING, BY MATERNAL AGE

	GHQ Score		Life satisfaction score	
	Mum aged 16-25	Mum aged 36-55	Mum aged 16-25	Mum aged 36-55
Less hours slept	-.046	-.149	-.018	.027
Poorer sleep quality	-3.40***	-1.83 **	-.354 **	-.309 **
Has partner	.214	-.058	.593 **	.236
Is employed	.040	.016	-.204	.209
Age				
Income	.000	.000	.000	.000
Household size	-.433	-.231	.005	.263
No health problems	2.14**	1.88 **	.891 ***	.601 **
Female				
Has degree	.589	.437	.027	.344
R squared	0.16	0.14	0.12	0.11
N	266	125	266	126

Sleep duration is not significantly related to either group's GHQ scores, as it was not in the pooled group of all mothers. Sleep quality is however again significant, demonstrating that it is the quality rather than the duration of sleep which is of importance to new mothers. However, by running the model separately for the oldest and youngest mothers, it can be seen that effects upon well-being are greater for the younger mothers, with whom poorer quality sleep is associated with a negative effect of -3.40 ( $p=0.000$ ). This is in comparison to a negative effect of -1.83 ( $p=0.011$ ) amongst the older mothers. Therefore, whilst the negative effect of poorer sleep quality is evident for both subgroups of mothers, the younger mothers appear particularly sensitive to it. This difference in effect size is also statistically significant ( $p=0.006$ ). It can also be seen that having a partner is associated with improved well-being, but for the younger mothers only. This may suggest that needs for help and support are higher when a mother is younger.

The same patterns are evident when investigating life satisfaction scores. Sleep duration is again not significant whereas sleep quality is. For younger mothers, a lower score of -0.354 ( $p=0.000$ ) is associated with poorer sleep quality, compared to the smaller negative effect of -0.309 for the older group. However in this case, the difference is not statistically significant ( $p=0.204$ ).

***Partnership status***

Table 3-12 compares the mean well-being scores for those who are either married or cohabiting, and those who are not (single, separated, divorced, widowed)

TABLE 3-12 MEAN GHQ SCORE BY MATERNAL PARTNERSHIP STATUS

	Mean GHQ score	Mean life satisfaction score
Mum who is married or cohabiting	25.4 (n=685)	5.49 (n=687)
Mum who is not married or cohabiting	24.5 (n=209)	5.04 (n=208)

It can be seen that mums who are not married or cohabiting have a lower mean GHQ score than those who are. Their average score is 24.5, compared to 25.4. They also have a lower life satisfaction score of 5.04 compared to 5.49.

Table 3-13 displays the regression model results:

TABLE 3-13 SLEEP AND WELL-BEING BY PARTNERSHIP STATUS

	GHQ Score		Life satisfaction score	
	Mum married/cohabiting	Mums not married/cohabiting	Mum married/cohabiting	Mums not married/cohabiting
Less hours slept	.108	.190	-.010	-.027
Poorer sleep quality	-2.27***	-3.66***	-.232 **	-.521 **
Has partner				
Is employed	.287	-.537	.044	.050
Age	-.064	-.672	.097	.283
Income	.000	.000	.000	.000
Household size	-.044	-.479	.041	.012
No health problems	2.02 ***	1.38	.488 ***	.748 **
Female				
Has degree	.266	.133	.144	-.056
R squared	0.13	0.10	0.16	0.12
N	651	188	652	188

When comparing by partnership status, there is a larger negative effect of poorer sleep quality upon GHQ scores for those who are not married or living with a partner ( $b=-3.67$ ,  $p=0.000$ ) compared to those who are ( $b=-2.26$ ,  $p=0.000$ ). Therefore, whilst poorer sleep quality is associated with lower well-being in both cases, those who are not married or cohabiting appear to be more at risk of larger declines. This difference in effect size is also statistically significant ( $p=0.019$ ).

The same pattern can be found when the dependent variable is life satisfaction. Those who are married or cohabiting are associated with a decline of  $-0.232$  when poorer sleep quality is experienced ( $p=0.016$ ) compared to the larger decline of -

0.521 ( $p=0.009$ ) amongst those who are not married or cohabiting. This difference is also statistically significant ( $p=0.025$ ).

To summarise, there are indications of different levels of effects upon well-being when poor sleep is experienced amongst subgroups of mothers. Younger mothers appear to be more vulnerable than those who are older. This may reflect lower levels of education, preparation and less developed coping abilities. Mothers who are not cohabiting or married appear more at risk than those who are in partnerships. This may reflect lower levels of social support and help with nighttime care. There is therefore a need to recognise the differentiation that exists between new mothers and varying levels of resilience and vulnerability.

#### ***3.5.4. What is the subjective experience of the sleep changes?***

The qualitative analysis enabled a focus on the more subjective aspects of the changes to sleep that are experienced by new mothers. It provided more personal and detailed information concerning how they are perceived and adjusted too, and also some further insights into their relationship with well-being levels. Three main themes emerged from the qualitative analysis; associations with well-being and the social reasons underlying this association, how the sleep changes are made sense of at a more internal, psychological level, and how they are adjusted to over time in more practical ways.

#### ***Associations with poorer well-being and the social reasons underlying this association***

The quantitative analysis revealed an association between sleep measures— in particular poorer sleep quality – being associated with poorer well-being amongst new mothers. The qualitative analysis of interview data also echoed an association between poorer sleep and poorer well-being. The sample focused on mothers only and therefore did not enable comparisons with fathers. However



by allowing mothers to talk freely about the experience of these sleep changes, more detailed insights can be gained, such as how sleep changes were situated amongst the vast number of other changes a new mother also encounters, and some of the reasons underlying associations with well-being.

Coping with the sleep changes was often described as one of the most challenging aspects of new motherhood and something that, for some women, was negatively affecting their emotions and moods. One mother of a child who is still not sleeping well at her final interview described how the night wakings are taking their toll on her well-being and making her feel as if she is not coping :

*“it’s taking a lot out of me by doing that but sometimes I do get a bit mad and think oh god couldn’t you have slept for a little bit longer ‘cos I just fall flat asleep and then she wakes me up” (Interview 32, final interview),*

Some mothers noted how their tiredness created feelings of anger and feeling depressed. The lack of sleep was also reported to negatively influence physical health also, with some of the mums mentioning complaints such as stinging eyes and headaches:

*“I mean then I started getting constant headaches like um waking up every hour having to wake up every hour and as soon as you go fast asleep I mean nobody would like that “ (Interview 32, final interview)*

Even when lower well-being levels were not specifically mentioned, it was clear that sleep changes were still viewed as a significant difficulty encountered that made adjusting to and fulfilling the mothering role more challenging. Many of the participants spoke about changes to sleep as a particularly demanding aspect of the transition to motherhood. Nights was described as ‘hard’ with some participants describing the lack of sleep as the ‘only problem’ suggesting it is less easy to cope with than the other changes that take place and has a more significant impact.

*“The only thing is with the sleeping, that’s the only problem, everything else is.... I mean when you’re tired anything’s [...] hard when you’re tired.” (Interview 03, 2<sup>nd</sup> interview)*

This particular mother notes how the tiredness is specifically what makes her new role harder, repeating the word ‘only’ and stressing how coping with sleep changes is the most difficult aspect of her new role.

The qualitative analysis also provided information concerning possible reasons behind these associations with well-being by enabling women to talk at length about the sleep changes and provide more detail. An obvious reason is that once a baby is sleeping for longer periods and with less wakes, a mother is able to sleep more herself. However the interviews also showed evidence of more social reasons as to why establishing better sleep experiences was important; the opportunity to have time to herself and also to revisit other social roles.

A number of the mothers were clear about the importance of ensuring particular sleeping habits and patterns in order to allow them some degree of release from their role as a mother. Even if the mothers were not sleeping whilst their baby slept, they were still able to have some time to their self. Some of the mothers describe how when their baby sleeps, it enabled them to partake in activities they would not be able to do otherwise, such as getting jobs done around the house, or simply watching some television. One of the mothers describes how her partner tells her to go to bed herself when the baby does in the evening, but she stresses the importance of having some time to herself:

*“You know, that I need that time for myself, those few hours where I know she’s not gonna wake up for a feed, she’s not gonna need a nappy change, you know, where I can just relax, I can talk to my friends, I can do different things”. (Interview 06, 2<sup>nd</sup> interview)*

An opportunity to relax and spend time without the baby therefore emerged as something that many of the mothers looked forward to, and one of the significant benefits of a baby that slept well. Whilst the mothering role does not cease, it is a chance for the mother to reconnect with herself and some aspects of her life and social activities that were the norm before the baby arrived.

It was also mentioned that this degree of respite enabled the mothers to more successfully juggle their other social roles, for example talking to friends. Changes in friendships were noted by some of the mothers, due to tiredness and being busy, and therefore once the baby was sleeping better it allowed an opportunity for revisiting these friendship roles. Another mother who was trying to finish a college course noted how it had become easier to do once her baby has become more settled into a routine. A baby's sleeptime was also seen as an opportunity to spend time with a partner:

*“Um [...] and then we’ve had nice times in, where we’ve ordered ourselves really nice food and just made the night ours. And {baby daughter} settled to bed at 7.00 and we’ve just chilled really nicely together. And I’ve switched off from work, and he’s been able to get back early from work, and things like that.” (Interview 016, final interview)*

The ability to have the baby settled by 7pm is noted as being of prime importance in achieving a relaxing evening with this mother's partner. The degree of respite that comes with the baby sleeping therefore can be seen as allowing a new mother to reconnect with her partner and enjoy some relaxing time with him, and therefore makes it easier to combine the role of both wife/girlfriend and mother.

The qualitative analysis therefore supports associations between sleep changes and well-being, and situates sleep changes as one of the primary difficulties encountered in the transition to motherhood. Furthermore, social reasons for this association are also alluded to, such as the need for having time to oneself and being able to juggle multiple roles.

### ***Making sense of the sleep changes***

Whilst the quantitative data can provide detailed and objective information concerning patterns and associations, the qualitative analysis can reveal more

personal insights into how the sleep changes are thought about and what meanings are attached to them.

Amongst some of the mothers, a rational, pragmatic attitude towards the sleep changes was noted. A more ‘matter of fact’ attitude was adopted and the mothers were able to reconcile these changes as part of their new role as mothers. Some of the mothers describe how they have become used to it now, whilst others state that it just has to be accepted as part of caring for a baby. Giving the sleep changes a sense of meaning and purpose and viewing them very much as a part of the mothering role rather than a hindrance to it appeared to be beneficial in helping the mothers cope.

Ensuring the baby was well rested and slept safely therefore came to be seen as a duty inherent within the mothering role. This was often at the expense of the mother’s own sleep needs, as a negotiation occurred between her needs and those of the baby, with the baby’s often surpassing those of the mother. For example, when one of the mother’s babies was unwell, she held him all night to help him sleep, at the expense of her own comfort and ability to rest herself. Another describes how even when the baby is asleep, she wakes frequently to check on him and ensure that he is safe;

*“Yeah, sometimes he doesn’t even wake up for feeds. But I get worried, and I’m awake more than him, checking on him. So um that’s the hard part.” (Interview 34, 2<sup>nd</sup> interview)*

Whilst this disruption to the mother’s sleep is frequently described as ‘hard’, it is also viewed as something that is necessary and purposeful. A sense of resilience and obligation is therefore suggested which helps the mother to tolerate the sleep changes that occur and seemingly limit the negative effects upon her well-being.

Sleep is therefore conceptualised as both a challenge and a duty. Whilst coping with the sleep changes is experienced as difficult, they are also internalised into the mothering role and seen as a demand of the role that must be endured. This may account for earlier findings that suggested poorer sleep had larger negative effects upon the well-being of non-parents. Perhaps not having this ‘reason’ and ‘purpose’ to the poorer sleep experiences exacerbates and increases damages to well-being.

### *Coping practically with the sleep changes*

In addition to these more internal formations of perceptions and rationalisations, discovering more practical tactics, strategies and resources that allowed the sleep changes to be managed more easily, and thus curb declines in well-being. The qualitative analysis therefore unveiled these more individualised responses and also provided insights into how managing the sleep changes appeared to be part of the mother’s ‘finding their way’ in the transition to motherhood.

Many of the mothers relied heavily on social support networks and these were often described as invaluable. Partners and other family members, in particular the mother’s parents or parents in law, constituted a source of help and support. Many of the baby’s grandparents looked after the baby at times, allowing the mother to rest, sleep and/or catch up on jobs around the house. In some instances this was mainly in the immediate time period after the baby’s birth, allowing the mother to recover, however in other cases this help continued throughout the course of the interviews and happened frequently. It was commonly noted as being extremely beneficial to the mother:

*“Oh yeah every Friday my mum takes him every Friday to give me a break Friday night, so that does help keeps you sane”. (Interview 026, 2<sup>nd</sup> interview)*

Here we witness an indirect reference to the difficulties in challenges involved in the care of a baby, and the importance of some degree of respite from this in enabling the mother to cope.

Other commonly mentioned methods of coping with the changes to sleep patterns included trying to nap when the baby does if possible, and also the mother employing cognitive techniques such as reminding herself that this stage of sleep problems will not last forever. Religion also acted as a coping mechanism for some of the Islamic members of the sample, who explained that there are believed to be rewards for looking after the child and enduring the difficulties of motherhood, such as the nighttime wakings.

Sometimes the coping strategies used were not what the mother thought she would initially do but the experience of sleepless nights and early mornings caused this to change. For example one mother now puts her baby to sleep on his front despite initially planning to put him to sleep on his back, whilst another remarks:

*"I always remember before he was born my dad use to say you can put him in your bed with you and sleep and I was like no way never do that, what if I roll over on him? And he was like you won't roll but how do you know that? But I tried it and now in the mornings he starts getting cranky about 6.30, 7 he's getting ready to wake up so I just put him in my bed with me and put a pillow on the side so he doesn't roll off or anything and he goes back to sleep and we both just sleep there." (Interview 018, 2<sup>nd</sup> interview)*

With this extract a negotiation between a mother's own plans and opinions, and the need to gain enough rest is witnessed, with initial views changing as the need for rest takes over.

There are therefore a range of strategies that are employed by the mother to help her cope with the sleep changes that occur following the birth of a baby. The efforts that are gone too in order to try and achieve this highlight how much some extra sleep is keenly sought after. Coping with the sleep changes becomes an important part of the transition to motherhood, and shows the processes of

change, negotiation, drawing on support networks and learning that takes place. It was previously noted that certain subgroups of mothers fare worse than others when poorer sleep is encountered, and therefore the allocation of coping resources and mechanisms may differ amongst these groups.

To summarise, the qualitative analysis revealed further information about sleep and new motherhood and associations between sleep and well-being, by enabling an awareness of the lived experience of the sleep changes, how they are perceived, adjusted too and reasons behind their impact. Whilst the quantitative analysis provides detailed and thorough information on associations and patterns, the qualitative analysis adds more subjective insights and an awareness of the more micro-level information that can be best be gained by sample members talking at length about the topic in a flexible and open manner.

### **3.6. Discussion**

This study has provided a number of findings concerning the sleep changes experienced by new mothers and their associations with well-being, and additionally comparisons with new fathers, non-parents and also amongst differing subgroups of mothers. The key findings from both the quantitative and qualitative analysis will now be summarised jointly and discussed in light of the literature previously reviewed.

Findings suggested an association between having a young child and a shorter duration of sleep, and poorer quality of sleep. This was in agreement with previous findings concerning the impact of young children upon sleep patterns (Swain 1997, Lee et al 2000, Cottrell and Karraker 2002, Gay et al 2004, Hunter et al 2009). It also lends support to the view that sleep changes and disruptions

can be understood as relating to social role changes, rather than topics for solely medical discourse ((Williams et al 2010, Venn et al 2008).

Supporters of the sociological view of sleep have noted how mothers are socially constructed as primary carers of children, and how consequently their sleep can be greatly impacted upon by aspects of their caring roles and the emotional aspects of family life (Hislop and Arber 2003, Bianchera and Arber 2007). However, whilst this study finds support for the impact of a child upon mother's sleep patterns, it also included fathers in the analysis and additionally found that having a young child is associated with changes in their sleep also, in particular a larger size decline in sleep duration than was found for mothers. This is therefore in contrast to previous findings and arguments that have suggested it is predominantly mother's sleep that is impacted upon, and instead points to effects upon sleep for both parents. This may act as criticism for the view that gendered norms position women as primary carers of children, and instead suggest that men are assisting and helping at night also. Or, it may reflect that whilst mothers are engaging in the actual care at night time, fathers are still sufficiently disturbed so that they receive less sleep as well. According to these findings, men are not immune from the impact of a baby upon sleep, although further research is needed to ascertain exactly what their nighttime role is.

Also of interest was the association with these sleep changes and well-being. Previous research has positioned early motherhood as a testing time for well-being (O'Hara et al 1991, Campbell et al 1992, Cox et al 1993, Arendell 2000, Matthey et al 2000) and one such reason for this may be the experience of sleep disturbances (Pilcher and Ott 1998, Ford and Cooper Patrick 2001, Williams et al 2010).



Links with well-being were suggested by the qualitative analysis, with some mothers specifically mentioning associations with poorer mood and feelings, and many of the mothers describing the sleep changes as one of the main challenges encountered, over and above the various other changes that are experienced. The quantitative analysis also found that amongst mothers, poorer sleep quality was associated with lower well-being. This is therefore in line with the previously mentioned research that has suggested an association between sleep and maternal well-being (Hiscock and Wake 2001, Lam et al 2003, Dennis and Ross 2005, Bayer et al 2007). Sleep duration was not significantly related to mother's well-being however. It therefore appears that mothers seek some better quality sleep – perhaps unbroken and/or deeper sleep, rather than a longer time asleep but with frequent wakes. Including the different sleep measures therefore enables further information to be gained concerning how sleep changes are associated with the well-being of new mothers.

The qualitative analysis provided some information pertaining to the reasons behind associations between sleep and well-being for new mothers. Being able to have some time to themselves and reconnect with aspects of the old lives pre-motherhood was something keenly sought after, and having a baby that slept well enabled this to be more easily achieved. The ability to mix the social role of motherhood with other social roles, such as friend, partner, or student, was also mentioned as being beneficial to the mother's well-being. This presumably helped to prevent feelings of role strain that may be common for a new mother (Simon 1992, Morris and Levine Coley 2004 ). Having a baby that slept poorly therefore did not allow for these opportunities of a temporary release from the mother role and the positive opportunities that can be gained from this respite. It is interesting to note therefore that the focus was not always on the mother

catching up on sleep herself – but more so on catching up with enjoyable and relaxing activities that were otherwise now difficult to engage in, and revisiting other roles and states that are missed.

Comparisons were also made between mothers and fathers, and it was found that both sleep quality *and* sleep duration were associated with the well-being of fathers. Mothers therefore seem more resilient when less sleep is had. A possible reason for men's heightened vulnerability may be that they are more likely to be in employment, and therefore unable to take naps to compensate for less sleep at night. Mothers, on the other hand, who may be on maternity leave or have left employment, are more able to nap when the baby does during the day. This finding is in contrast to previous findings that have suggested men may be more resilient when poorer sleep is had, as a result of social norms concerning masculinity which influence men to adopt a 'devil may care' attitude towards sleep (Courtenay, 2000). This study therefore suggests not only that fathers sleep is impacted upon by a new baby to a similar degree as a mother's is, but also that these changes are negatively associated with their well-being levels.

Furthermore, amongst women who did not have any children in the household, sleep duration *was* of importance to well-being. The finding of sleep duration not being related to well-being therefore seems related to the role of motherhood rather than a gender effect. It may be the case that a new mother re-evaluates her sleep norms and expectations when she has a young child, and is more accepting of less sleep and is able to cope better with it as she understands it to be part of her new role. Disrupted sleep however, seems less easy to cope with. This process of sense-making was alluded to in the qualitative analysis, which provided insights into internal perceptions that are formed and engaged with by

new mothers. A rational, pragmatic attitude and a sense of viewing the managing of the sleep changes as a duty of the mothering role helped the new mothers to see the sleep changes as having a reason and a purpose, and that they were something to be endured whilst the baby was young. Martell (2001) described how new mothers become accustomed to a 'new normal', and for some women therefore, having less sleep is perhaps accepted as an aspect of their 'new normal'. Those who did not have children in the household and were therefore experiencing sleep disturbances for other reasons may not have had this sense of purpose or meaning, or a perceived new era of their life in which sleep changes are a normal part, and therefore have been more at risk of poorer well-being.

Comparisons with those who did not have children in the house also revealed another interesting finding; lower well-being that was associated with poorer sleep were actually comparably larger amongst those who did not have children in the household. Whilst poor sleep is therefore negatively associated with well-being for new parents, those suffering from poor sleep for other reasons (perhaps other sources of stress, or poor health) are more vulnerable. One possible reason for this is that having a baby is generally a mostly joyous event, and therefore challenges such as poorer sleep are coupled with happier changes and experiences which help to bolster well-being. Another is the ability to plan for the sleep changes that are likely to come with a child, and the awareness that they will most likely be experienced. This preparation and early adjustment may not be possible with other causes of sleep disturbance. This may also account for differences in the association between the sleep measures and well-being between mothers and fathers; perhaps mothers engage in more forward thinking and early adjustment than fathers, and therefore when the sleep changes are experienced they are less of a shock. Previous studies have suggested that

mothers-to-be do undergo intense preparation processes (Smith, 1999, Hart and McMahon 2006) whereas fathers may be less prepared (Deave and Johnson 2008). The lack of attention paid to sleep issues by men that Courtenay (2000) refers to, may do them a disservice by failing to prepare them for the changes and disruption that an infant is likely to cause.

Comparisons were also made between differing subgroups of mothers to better understand the association between sleep and maternal well-being and unveil possible risk factors. Whilst previous research has suggested particular risk factors for post natal depression in general (Warner et al 1996, Rogan et al 1997, Goldstein and Ross 1989, Milgrom et al 2008), there has been less attention given to the specific ability to cope with sleep changes. It was found that the negative association between poorer sleep quality and well-being was larger amongst the younger mothers than the older mothers. Previous research has suggested that younger mothers may be more vulnerable to lower well-being (Deal and Holt 1988, Reck et al 2008), perhaps due to lower education levels, less financial security, and less social support. It may be the case that younger mothers are less prepared for the sleep changes and have less developed coping resources to deal with them.

Declines in well-being associated with poorer sleep quality were also larger amongst those who were not married or cohabiting compared to those who were. This is in line with previous research that has suggested mothers not in partnerships may be more vulnerable to lower well-being (Pfof et al 1990, Kiernan and Pickett 2006). Lower levels of social support and being the sole night-time carer therefore likely make coping with the sleep disturbances harder. These findings highlight how mothers are not a homogenous group and that there may be certain factors that generate either enhanced vulnerability or

resilience when it comes to sleep disturbances, and also further support the argument concerning the sociological aspects of sleep in the sense that differing social characteristics come to yield particular associations and different degrees of risk.

### **3.7. Conclusion**

This study aimed to build upon previous work concerning the transition to motherhood, by specifically focusing on the changes to sleeping habits that tend to occur following the birth of a baby, and their impact upon well-being. A mixed methods approach was used to investigate various aspects of the topic, with the use of both quantitative and qualitative research methods enabling a detailed and thorough investigation.

This study adds to current knowledge in a number of ways. Firstly, it contributes to the areas of the transition to motherhood and maternal well-being. Previous studies have rarely had sleep as the main focus, yet this study has revealed it to be an important and influential aspect of these topics. Of the studies that do exist concerning motherhood and sleep, they have tended to focus on older mothers, and also not had a specific focus on well-being. This study therefore sheds light on new mothers who are encountering an intense life event and significant change, and reveals sleep to be an integral part of this which can have effects upon their well-being levels. Rather than treating mothers as a homogenous group, demographic characteristics are taken into account and show that certain subgroups of mothers may experience an enhanced risk. This study also includes fathers in the analysis, and critiques the view that they are immune from the sleep changes and their potentially negative effects.

Comparisons with non-parents also reveal that the social context is of importance when investigating sleep disturbances.

Methodologically, it has been seen that the use of a mixed methods design is beneficial to this topic by providing both objective and subjective information concerning both patterns and trends, and also information regarding the lived experience of sleep changes. The findings have also pointed towards the worth of investigating different aspects of sleep, such as the length of time a person sleeps and also the quality of the sleep.

There are some methodological limitations to consider within this chapter. Firstly, parents of a young child are compared against those who do not have any children in the household in many of the regression models. Whilst this does allow comparisons to be made on the basis of those raising a young child and those who are currently not, there are a number of other characteristics that differ between these groups which could additionally be influencing the sleep experiences they have. For example, it is likely that the comparison group are of a higher age (having had children grow up and leave home), and previous studies have suggested that sleep patterns change in later life, for example sleep duration often becoming shorter (Morgan 1987). Whilst efforts have been made to include a number of control variables in the models, it may also be beneficial to have a differently constructed control group, and then to compare results to ensure accuracy and validity in findings. For example, restricting the comparison group to people of a similar age to those of the parental group. Similarly, the control group could remain those with no children in the household, but matching techniques could be applied to ensure the age distributions between the two groups are similar.

There are also some methodological limitations with regards to the secondary qualitative data set. Firstly, there are some methodological considerations of using secondary data in general, which are included in the appendix. With particular reference to this data set specifically, the sample group was small, and from one specific geographical area. It therefore lacked representativeness and no firm conclusions or generalisations to the wider population can be made. It provides some initial ideas and avenues for future research to build upon, but a larger sample and a more systematic and thorough selection of a varied and representative group of respondents will be needed for future research to build upon this.

The chapter does also make use of self-report measures, which may potentially yield inaccurate responses. For example, self report measures of wellbeing may be likely to be impacted by social desirability concerns, with it being most likely low levels of wellbeing are under reported (Chen et al 1997, Soubelet and Salthouse 2012). The sleep duration measure is also self reported, and this could be impacted by a number of confounding factors. For example, it relies on a person's recollection of their sleep duration. It is not common practice to keep a written daily record of this information, and this may therefore be inaccurately remembered. Furthermore, there are distinctions between the different stages of sleep. For parents of young children who wake frequently, it is typical to spend more time in the lighter stages of sleep (Brunner et al 1990), for some these may be counted as sleep and included in the sleep duration evaluations, however others may disregard very light and short periods of sleep. Objective measures of sleep duration and also number of night time wakings would therefore counteract some of these limitations.

There are various directions for future research to pursue to build upon these findings further. In terms of the qualitative work, the sample size was small and featured mothers only, therefore future qualitative work in this area could make use of a larger and more varied sample. A closer focus on fathers would be particularly useful, as many previous studies have stressed women's gendered roles as carers, yet findings from this study have suggested men's sleep and their well-being is also considerably affected. Therefore, a closer look at the role of fathers in adjusting too and dealing with a baby's sleep patterns would shed further light on fathering roles and gender differences.

The quantitative work was cross-sectional, whereas longitudinal data would allow a number of interesting lines of inquiry to be pursued, for example whether well-being levels adapt over time if the child remains a poor sleeper. Parents could be tracked over time to enable an investigation into the association with sleep and the decision to have another child; if the first baby is a particularly poor sleeper, is a longer gap between children evident? Longitudinal analysis would also allow further investigation into the causal relationship between sleep and well-being, does sleep lead to poorer well-being, or is it a case of poorer well-being causing poorer sleep? The cross sectional analysis performed in this study can only show an association between sleep and well-being. Finally, this current study has only featured first time parents of just one child, it would therefore be of interest to research how things change and differ in the case of subsequent children; are effects upon well-being attenuated and how is the experience different second time around? Have parents built up knowledge and experience to negate the negative effect of poorer sleep or is it in fact more stressful when there are two (or more) young children to look after? The role of differing family



dynamics and sizes would therefore be a potentially interesting area for future research.

Based upon the findings of this study, a number of policy recommendations can be made. Recognising the impact of sleep changes upon the transition to motherhood and well-being levels, it is suggested that post natal check-ups should include specific questions regarding sleep in order to ascertain if new parents are experiencing problems and to what extent it is negatively effecting them. Advice concerning managing sleep changes could also be given. Particular focus may be paid to those subgroups of mothers who are potentially at a heightened risk of struggling to cope. Fathers have also been shown to be at risk of poorer well-being, and therefore should also be considered in these health checks, and advice should be presented to them also.

It is those who are not parents who may suffer most from a poor sleep experience, suggesting in fact that the expectation of poorer sleep following the birth of a baby and the sense of purpose in managing it, may lessen the negative impact to a certain extent. It is therefore also suggested that including advice and information concerning sleep changes in *antenatal* appointments and classes would likely help parents by raising awareness and expectation and help them to consider possible coping strategies at an early stage, *before* the baby's arrival.

Overall, this study has provided some initial insights into the experience of sleep changes and associations with well-being, and has drawn attention to suggestions for them to become a more prominent part of ante and postnatal care, recognising their potential impact upon new parents.

## 4. Conclusion

### 4.1. Background to thesis

There has been a growth in academic research concerning well-being since the 1970's, whereby topics such as non-clinical emotional states and cognitive judgements of life satisfaction have been empirically investigated. In more recent years, such issues have also come on to the policy agenda, with a recognition that societal progress cannot be measured thoroughly and accurately by using economic indicators alone, and that instead, a range of indicators – including those corresponding to everyday experiences and personal evaluations of an individual's own well-being – are of prime importance. For example in 2010, the prime minister David Cameron called for a large scale research initiative to study happiness and its social patterning throughout society, aiming to build a more comprehensive understanding of national well-being.

The majority of existing empirical research comes from an economic perspective, with a lack of more sociological application and theorising. For example, it may be investigated whether life satisfaction levels differ between men and women, but sociological theories pertaining to the differing social roles of men and women are often not considered. It was therefore the aim of this thesis to investigate well-being from a more sociological perspective, building upon existing knowledge and increasing the applicability of well-being research.

To do this, a well-established topic within the sociological arena was the focus of study; the family. By linking the topics of the family and well-being via a predominantly sociological approach, a number of advantages are gained. In addition to increasing the applicability of well-being studies, the applicability of

family based research is also enhanced by appreciating associations with this burgeoning area. This also allows more contemporary work within family studies, such as the more intimate aspects of family life and relationships to be addressed, by linking these to well-being. A bridge between these more 'social' aspects of the family and the more 'individual' topic of well-being is made. Furthermore, it enabled empirical testing of family based topics such as the changing nature of the family in modern society, the state of family relationships in a time of increasing individualism, and gendered roles when family change occurs.

It was found that a sociological perspective, and the topics of the family and well-being, lend themselves well to being integrated and investigated together. A number of associations between the family and well-being were evidenced, and sociological theory was applied to the different topics studied. The family can be understood as a useful topic for well-being research, and rather than viewing well-being as merely an individual topic not suitable for sociological study, instead its associations with social roles and relationships is demonstrated. Some of the main conclusions from the individual chapters will now be discussed.

### **4.2. Conclusions from individual chapters**

Chapter 1 investigated the moderating role of marital status when stressful life events occur. Whilst being married has generally been shown to be positively related to well-being, there has been little consideration of the role of marital status in light of specific life events, such as unemployment or poor health onset. Furthermore, there has been much less focus on the associations between cohabitation and well-being, despite the demographic changes in relationships

that have occurred, with cohabitation becoming an increasingly popular relationship style in contemporary society.

It was found that being married or being in a cohabiting relationship was advantageous for well-being, with larger positive effects witnessed for men. When poor health occurs, being in a partnership is beneficial for both men and women, whereas when unemployment occurs, a positive effect of being in a partnership exists only for women. It can therefore be concluded that that whilst being married or cohabiting is *generally* beneficial, it may vary according to life event and gender, suggesting the marital status – well-being link is more complex than much previous research has recognised.

A sociological perspective on gendered norms and demands was adopted to explain such findings concerning the lack of a protective effect of a partnership for men when unemployment occurs. It was suggested that men's socially constructed and internalised views that they should be the main breadwinner within the family, actually may increase the stress of unemployment, and thus remove any protective effect. Women, on the other hand, tending to be more socialised into family life, household labour and childcare, may more easily adapt to a stay-at-home role and not feel such pressure.

There were no differences found in the associations with well-being outcomes for marriage and cohabitation. Previously existing studies have been mixed in their findings concerning whether it is the experience of being in a partnership, or being married specifically, that is most beneficial for the individual. The results of this study lead to the conclusion that it is being in a partnership – whether married or cohabiting – that is protective for well-being, and that there are no significantly enhanced benefits of being married over and above living with a partner.

Sociological studies of the family have often focused on these changing demographic trends, with it being noted that there has been a decline in marriage and a growth in living together. A number of social reasons for this have been stated, such as the growing independence of women, changing attitudes, and secularization. Critics of such demographic changes have suggested that the growth in cohabitation may signify the decline of the traditional family, which may have a range of negative outcomes (Davies 1993, Gittins 1993, Jagger and Wright, 1999). However in terms of benefits to well-being, this study finds that both forms of partnership are advantageous and that cohabitation need not be viewed as having less emotional and psychological gains for the individual. This suggests that cohabitation likely also provides the benefits often only ascribed to marriage, such as social support and opportunity for pooling financial resources. Cohabitation need not signify a weaker bond or less commitment, and may be in many cases be a pre-cursor to marriage, as opposed to an alternative, and therefore these benefits still exist.

The argument that the family may be in decline was also at the forefront of chapter 2. A number of sociological theorists have suggested that modern society is characterised by ever increasing individualism, which serves to disaffirm and undermine family ties and bonds (eg. Giddens 1992, Bauman 2003). Beck (1992), for example, argues that individuals increasingly live their lives and make decisions according to self-interest, reducing the stability of family relationships. In contrast, a relatively contemporary strand of research within family studies positions family relationships at the forefront of research. The 'intimacy of the family' (Jamieson 1998, Gabb 2010), which focuses on bonds and relational processes within the family unit and their value for individuals, suggests that

the family is still very much a social network with informative and worthwhile relations and attachments.

Family relations and their associations with individual well-being were tested via two measures. The first was parent-child relationship quality, measured via frequency of conflict. Positive and interactive parent-child relations may help to foster high levels of well-being, whilst relations with high levels of conflict may be associated with lower well-being (Barber 1992 Burt et al 2003, Marmorsten and Iacano 2004, Burt et al 2005). The second mechanism was transmissions between parental and child well-being. Support has been found for an association between the well-being states of couples (Schoebi 2008, Westman and Vinokur 1998), whilst a large body of research has documented associations between maternal well-being and emotional and development outcomes for infants (Kiernan and Huerta 2008, Meadows 2007, Petterson and Albers 2001, Silberg et al 2010, Turney 2011).

Despite this related previous research, there was still a number of areas that required further testing. For example, research pertaining to parent-child conflict has often focused on clinical disorders, as opposed to self-reports of emotional well-being and life satisfaction. Transmission of well-being between parent and child have rarely focused on older childhood and adolescence, when parental effects may potentially lessen as school and peer effects may become more salient. Furthermore, the gender of the youth and of the parents may be of importance.

Three different well-being outcomes were used; levels of youth happiness, self-esteem, and anti-social behaviour .It was found that a number of association exist between the parent-child measures and youth well-being.

It was therefore concluded that the family can be viewed as a social network, in which relationships and interactive processes are of importance to individual well-being. To put it another way, support is found for the view that family members and relationships ‘matter’ to each other, rather than merely being a collection of people simply pursuing their own individual needs.

It can also be concluded that this effect remains even into older childhood. At a time when a quest for individualism and autonomy from one’s family may be prominent, and when peer relationships come to the fore, family relations appear to remain important associates of youth well-being.

Whilst these conclusions have been drawn, there is a need to recognise the complexities that exist. For example, the nature of well-being outcome being used led to different patterns of effect, with anti-social behaviour – a more externalising manifestation of well-being, appearing to be different to the more internalised measures of happiness and self-esteem. This suggest that well-being is a multi-layered and diverse term, with different aspects being related to different factors.

Furthermore, divergent results were obtained for different parent-child dyads, drawing attention to the differing social roles of mothers and fathers, and the dissimilar relationship and parenting styles they may possess. These patterns of results may also reflect different emotional socialisation and needs of sons and daughters. A final conclusion from this chapter is therefore that the family unit and its social relations are

complex and intricate, with gender of youth and parent being associated with different effects and potentially moderating a range of outcomes.

Chapter 3 maintained a focus on family life and well-being, but focused more specifically on a family 'event', that brings changes to the family dynamic and everyday family life. Having a young child, and the potential changes to parent's sleep routines, was investigated. Previous research concerning the transition to motherhood and well-being have rarely focused specifically on sleep changes, and whilst some research has documented the changes to sleep routines that often occur, associations with well-being have not necessarily been taken into account, and also tend to focus on mothers only (Lee et al 2000, Cottrell and Karraker 2002, Gay et al 2004, Hunter et al 2009).

A sociological perspective upon sleep was discussed, which states that sleep can be understood as sociologically meaningful and a topic for sociology, not just biology or psychology as traditionally perceived. One such way that this is argued to be the case is by recognising the impact of social roles upon sleep norms and habits. For example, how gendered norms of parenting position women as the primary night-time carer, with mothers tending to have their sleep disrupted more so than fathers (Hislop and Arber, 2003)

It was found that having a young child (aged 0-2) was associated with a shorter duration and lower quality of sleep for both mothers and fathers, when compared to those who have no children in the household. It may therefore be concluded that that sleep habits and patterns do alter according to social role changes such as becoming a parent, supporting the argument that sleep can be understood as sociologically meaningful and



impacted upon according to different social roles throughout the life course.

Associations with well-being were also evidenced, with poorer sleep quality being negatively related to a mother's well-being, thus indicating that sleep may be an important, yet often overlooked, contributor to the new motherhood – well-being association. This was also supported by the qualitative analysis, which showed sleep as one of the primary difficulties and challenges faced by mothers. The quantitative findings however also alluded to the effects upon fathers also; both sleep duration and quality were related to father's well-being outcomes. This is in contrast to many previous studies concerning gendered roles, parenthood and sleep. The study does not reveal what the father's nighttime role actually is; whether he is actually engaging in nighttime care or simply disturbed as his partner does. However it does suggest that fathers are not immune from the sleep changes experienced.

It may also be concluded that the social context surrounding sleep changes is of importance. Sleep changes were seen to have larger negative effects amongst those who were not new parents, indicating that sleep disturbances that may occur for other reasons may be more risky for health and well-being. There is therefore a need to not just simply look at sleep changes, but their surrounding environment. The qualitative analysis revealed potentially beneficial coping mechanisms and sense-making processes that mothers may use, which may not be applicable when sleep changes occur in other social contexts.

A final conclusion to be drawn from this chapter is that when researching into motherhood, mothers should not be treated as a homogenous group and instead attention should be paid to within-group differences to test whether certain subgroups are more or less vulnerable than others. For example, findings from this study showed that those who were single, and younger, experienced larger negative associations between poorer sleep quality and well-being.

### **4.3. Conclusions from across the chapters**

Whilst the three chapters were intended to be understood as stand-alone pieces of research, they also all share a focus on the family and well-being, and therefore some cross-chapter conclusions can be drawn concerning this overarching theme.

A common conclusion from all three chapters was the relevance of gendered social roles to the understanding of associations between the family and well-being. For example, Chapter 1 noted the different impact of marital status upon well-being when unemployment occurs, for men and women. It was concluded from the findings in chapter 2 that when investigating within family process and relationships, there is a need to take into account the different roles of mother and father, and gendered socialisation and developmental processes experienced by sons and daughters. Finally, in chapter 3, the event of a social role change was examined, and the differential effects upon mothers and fathers. When investigating the family and well-being, the adoption of a sociological

perspective on gendered norms and social roles may be useful in understanding the complexities that exist.

Another conclusion to be drawn from all chapters was a focus on the enduring importance of family relationships for well-being. Whilst this was the core argument of chapter 2, it is alluded to in the other chapters also. As previously noted, there have been claims that contemporary society is characterised by a growing sense of individualism, which may be taken to negate the strength and relevance of family bonds and attachments (Sennett 1998, Beck 1992, Giddens 1992). For example Oliker (1989:4) remarks how the “spread of individualism and democratic values were, and continue to be central forces of family change. Individualism .....decreases the authority of kin”. Bauman (2003), in his work on what he has termed ‘liquid love’, describes the frailty of human bonds in contemporary society, the weakening of ties and the associated insecurity this brings.

Whilst changes to personal relationships and attachments may indeed be taking place, the findings of this thesis suggest that family bonds and relationships do still have importance as topics of study and do have significant associations with well-being. For example in chapter 1, being in a partnership was associated with improved well-being. And whilst there were some differences by gender, being in a partnership was generally beneficial when the life events of poor health or unemployment occurred. In chapter 2, it was found that parent-child relationship quality were associated with child well-being, and furthermore that associations exist between the well-being of parents and children. In chapter 3, it was seen how the challenges of having a new baby impact upon both mothers and fathers, but that single mothers fare worse. It is therefore the argument of this thesis that family relationships and bonds are a worthwhile and informative

avenue of sociological studies of the family, and that a focus on the worth of intimacy and relational processes (Jamieson 1998, Gabb 2010) provide a useful building block between a sociological focus on the family and its relation to well-being.

#### **4.4. Directions for future study**

This thesis has aimed to provide a more sociological study of well-being, via a focus on the family. Whilst a number of findings have been obtained, there are also a range of directions for future work in this area to pursue.

The sociology of the family covers a vast number of topics and aspects of the family, and therefore more of these can be studied alongside well-being. For example, whilst chapter 1 noted the changing demographic trend of more couple cohabiting, others such as rising divorce rates, later (or no) childbearing, and smaller families could also be investigated. How do these different family dynamics and changes relate to well-being, and sociological thinking concerning the changing nature of the family. Sociological focus has also been paid to the division of household labour; how do the different arrangements of employment patterns, childcare and housework relate to well-being outcomes? Ultimately, it would be useful to build a comprehensive body of work concerning the area of the family and well-being, covering a vast range of topics.

Future work could also adopt a stronger theoretical stance, with empirical work testing some of the ideas of the main sociological perspectives on the family. As previously noted, gendered differences in associations between

the family and well-being emerged at a number of points throughout the thesis, and whilst feminist perspectives on the family were mentioned, future work could elaborate on this and attempt a more thorough testing of the views of this approach.

It was also noted in the introduction that there are a number of methodological criticisms concerning the measurement of well-being. For example, the extent to which someone states they are satisfied with their life may be confounded by their current mood, or social desirability concerns. Chapters 1 and 2 used two different well-being outcomes (life satisfaction, and the GHQ score), whilst chapter 3 contained three measures of youth well-being (happiness, self-esteem and anti-social behaviour). This follows the advice of Diener et al (1999) who suggest using a range of measures that capture the different facets of well-being and allowing comparisons to be drawn between them. Future research could however go further in attempting to control for these possible sources of measurement error by including a greater range of controls, such as potential behavioural manifestations of well-being (alcohol consumption, for example).

It can also not be concluded from the chapters in this thesis, that whilst associations can be discussed and some effort has gone into improving methodological accuracy (the use of fixed effects models for example, which control for time invariant unobserved heterogeneity), causal relationships can still not be confidently stated. In chapter 2, for instance, although some use of lagged variables has been employed to investigate

parent and child well-being and conflict at different time periods, it is still not entirely clear which one drives the other, or if a reciprocal relationship exists. More advanced methodological analysis could attempt to ascertain causal relationships, and improve the accuracy and precision of findings.

#### **4.5. Overall conclusions**

The aim of this thesis was to link together the topics of the family and well-being, via empirical studies focusing on different aspects of family life and dynamics. It was argued that this would serve to enable a more sociological understanding of well-being. It was concluded that these topics lend themselves well to an integrated approach, and a number of findings concerning marital status, parent-child relationship processes, and family role changes have been discussed. Gendered differences in findings also emerged, suggesting the importance of considering these when researching in this area. Overall, the importance and worth of family relationships has been alluded to, yet also the complexity and variation that exists.

Referring back to social policy agendas and the call for the use of a wider range of indicators to measure social progress and welfare, it is argued that a focus on subjective well-being may be highly beneficial and informative in helping policy makers to understand what makes members of society feel positive and optimistic about their lives, and what should therefore be encouraged and strived for. Likewise, it can shed light on what makes people unhappy, and what should therefore be challenged

and prevented if possible. Following the argument of Vennhoven (2008), discovering such patterns should be one of the key aims of sociological research. By using data that is generated from members of the public themselves, whilst measurement problems must be taken into account, findings may also be more accurate, relevant, and insightful. Furthermore, a sociological approach to research in this area complements the more traditional economic or psychological approaches, by drawing attention to a number of important topics and theories, such as social roles, gender, and the experience of family life and relationships in contemporary society.

## 5. Appendix

### 5.1. Data set information

Chapters 1 and 2 make use of the British Household Panel Survey (BHPS). The BHPS began in 1991 and collects data from a large number of households in Great Britain. The survey follows the same representative sample of individuals, producing longitudinal data which can track changes over time. The chapters within this thesis make use of 18 waves of BHPS data. The survey contains a vast number of questions relating to the individual and household. It covers a number of topics relating to economic and social life, such as household expenditure, employment and relationship status and history, health and accidents, attitudes and family roles.

All adult members of a household are interviewed. In Wave 1, approximately 10,300 individuals were interviewed from approximately 5,500 households. In subsequent waves, booster samples of 1500 households from Scotland and Wales were added, and in 2001 an extra 2000 households from Northern Ireland were included in the analysis. This resulted in the BHPS now being administered to approximately 10,000 households across Great Britain. If household members split off to form their own households, they are followed and members of their new household are also added to the sample. Children become members of the panel once they turn 16 years old.

Chapter 2 additionally makes use of the youth questionnaire section of the survey. From 1994 onwards, this was included for 11-15 year olds from participating households. The youth questionnaire contains items relating to topics such as school and education, health and well-being, time use, and getting



into trouble. By using the unique identifiers, it is possible to match up the responses of a youth with their parent's responses (each youth has a unique identifier, as does the mother and father, there is also a household identifier to ascertain if they come from the same household, allowing matching of household members to take place).

There are certain core topics that occur in all waves. These include household composition, education and training and labour market behaviour. Therefore, assuming an individual has completed the survey at each wave – there will be 18 observations for each of the questions in these topics for the individual. There are also other areas of questioning which can be referred to as variable components. Other areas of questioning are more variable, occurring just a few times in the 18 waves, or rotating and occurring every 2-3 waves for example. This may be due to new areas of interest emerging over the duration of the survey at subsequently being added, or some areas of questioning not deemed necessary to collect annual information about.

Below is a table including some of the main variables used in Chapters 1 and 2, and the waves in which they occur.

TABLE 5-1 OCCURRENCE OF VARIABLES

Chapter	Variable	Appear in waves
1, 2	Ghq score	1-18
1, 2	Life satisfaction score	6-10, 12-18
1	Marital status	1-18
1	Limiting health	1-8, 10-13, 15-18
1	Employment status	1-18
2	Frequency of arguing with parent	4-18
2	Youth self esteem	4-18
2	Youth happiness	4-18
2	Youth vandalism	7-11, 18

Chapter 3 uses data from Understanding Society. This is a larger and more wide ranging survey that builds on much of the data of the BHPS. BHPS participants were asked if they wanted to take part in Understanding Society, and the majority did, being first interviewed for Wave 2 in 2010-2011. From Wave 2

onwards therefore, the BHPS sample has the same questionnaire as the Understanding Society general population sample, and the BHPS is effectively incorporated into Understanding Society.

Understanding Society is administered to approximately 40000 households. This survey again has core topics and items that are asked annually and also rotating components that are asked at regular intervals. Core components include employment, housing and health related questions, whilst rotating components include items relating to health related behaviours and social networks.

Within Chapter 3, only the first wave of data is included in the analysis, which enables cross-sectional, but not longitudinal data. The sleep measures of interest were only available in this wave as they do not occur every year. However the sleep based measures are rotating and are planned to occur in future waves, and therefore future analysis will be able to track changes in, and persistence of, sleep matters.

### **5.2. Secondary analysis of qualitative data**

The secondary analysis of qualitative data has been defined as “the reuse of pre-existing qualitative data derived from previous research studies” (Heaton, 2008:33). It involves the revisiting of previously collected data and may be used to verify original findings or to investigate new research questions, such as emergent themes that were not the primary focus of the original research (Heaton, 2008).

Whilst quantitative data has commonly been reused for secondary analysis, it has been less often the case with qualitative data. However Heaton (2008) notes that this began to change during the 1990’s, when awareness of the potential of

reanalysing qualitative data grew. There was a growth in interest and subsequently a move towards data archives accepting qualitative data.

In the United Kingdom, the UKDA (UK Data Archive) provides the specialist service of Qualidata; an archive containing a range of qualitative data sets. Qualidata promotes the access to and use of these datasets for research and teaching purposes. Data creators are liaised with closely to ensure high quality data sets and efficient archiving whilst prospective data users are given advice and support concerning reuse. Many of the data sets are acquired via the ESRC Research Data Policy which requires award holders to submit their data collections for archiving and future sharing.

The secondary analysis of qualitative data is the topic of much debate amongst researchers; there are opposing views concerning the suitability and usefulness of reusing data of this type. One such area of concern is what Heaton (2008) refers to as **‘the problem of data fit’**. This corresponds to the idea that if data is collected with a primary purpose in mind, i.e. that of the research aims of the original research, to what extent can it be used for a different purpose. This is certainly an important point to consider when contemplating some secondary analysis. The original research will have been moulded and shaped by original aims and areas of interest, with initial interview questions and follow-up questions reflecting this. The key focus of the interviews will likely be something very different to that of the secondary researcher, in which case how useful will this data set be? How much relevant information will it contain, and how much will be lost by not having the ability to probe into these sought after areas?

It must be acknowledged that a limitation of reusing a data set will be this loss of information and the lack of opportunity to steer the interview into a direction more suitable. However there are steps that can be taken to minimise this

particular problem. The secondary researcher must spend considerable time and effort in researching the data set and being sure that there is enough valuable and relevant information available. Rather than approaching a data set with a question already in mind, it may be more fruitful to study the data set first and then spot recurring themes that have not been fully analysed, of which there is more information. It may be the case that certain data sets have a more specific focus than others and these are less likely to be suitable for reanalysis, however it should also be acknowledged that many data sets are less specific and may include a number of opportunities for further analysis. As Heaton (2008) states, much qualitative data is flexible and has scope for further research, but data sets do vary in breadth and depth and therefore careful consideration is needed.

Another potential problem that may be encountered when embarking upon secondary analysis is **'the problem of not having been there'** (Heaton, 2008). The secondary researcher must attempt to analyse data that was not collected by his or her self which may present challenges as confusion over meaning and interpretation may occur. Moore (2006) refers to the importance of context in qualitative data, and how it impacts upon data collection, for example the subtleties of the researcher-respondent relationship and how this may influence the flow of the interview. Broom et al (2009) argue this point further and state that qualitative data can be seen as co-produced between the researcher and the participant and that the researcher becomes a central feature of the data themselves. It has therefore been questioned whether qualitative data can be interpreted if this knowledge concerning the context and the original researcher's influence is not known. There may always be a risk of a discrepancy between what the respondent said in an interview and how the interviewer

interprets this, but this risk is maximised if the researcher was not even present at the interview, thus severely limiting the validity of the secondary analysis.

This limitation may again depend on the data set in question, how much the topic lends itself to misinterpretation and how well the data set is archived, for example is there some information about the interview context provided in the supplementary guidance notes. Moore (2006) argues that the research context should not be viewed as fixed and only occurring once, and in fact that with reanalysis a new context is created in the sense of new aims and areas of interest. Van den Berg (2005) argues that the constructed nature of qualitative data has been over emphasised, and that whilst the influence of the interviewer will have some bearing, the data cannot be reduced to this and that the primary focus is the interviewee. It may also be the case that in primary analysis, there may be only one researcher who collects the data, but multiple analysers; does this not also lead to questions concerning the validity of interpretation and the missing awareness of interview context? This may therefore be a feature of primary analysis also. Broom et al (2009) note that when multiple analysers were working on a project, different interpretive frames were used resulting in differing interpretations. There is therefore a strong need to be aware and considerate of these effects and how this might impact upon analysis.

Concerns also exist regarding the issue of **consent and confidentiality** when reusing qualitative data sets (Heaton, 2008). As the data set is being used for a purpose different to the one which was explained when the respondent when first interviewed, should consent be sought again? If so this leads to a number of practical problems in terms of obtaining contact information and tracing the respondents, with potentially a number of years having passed since the original data was collected. In terms of confidentiality, Parry and Mauthner (2004) note

that the in depth nature of qualitative data makes ensuring anonymity more challenging, and that removing identifying characteristics may lessen the quality and usefulness of the data.

However, It has been noted that there has been a movement away from consent being viewed as ‘one off’ (Broom et al, 2009) and that it is more commonly becoming understood as an ongoing state. The UKDA also has guidelines and frameworks for these matters, covering issues such as ownership, consent and ethics. The UKDA work with the original researchers to anonymise the data sufficiently (Bishop, 2005). Furthermore, as Bishop (2005) states, if a collection could not be adequately anonymised, or if doing so would severely impact upon the data quality, it would not be archived.

### *5.2.1. Application of these points to ‘Becoming A Mother’*

The point has also been made that when considering undertaking some secondary analysis of qualitative data, it is vital to study the data set well in order to decide whether reuse is a viable and well judged method to use for a research project. Some may be more suited to a research question than others and some may pose more concerns over issues of context and ethics. I will now therefore discuss some of the above raised points in light of the ‘Becoming a Mother’ data set.

The first consideration highlighted was that of **‘the problem of data fit’**. Does this data set adequately allow me to investigate my research question, considering it was designed with a different set of aims in mind? In my view, it does enable me to do this, as the data set takes a broad and general account of the experience of becoming a mother, and my research focuses more specifically on one particular aspect of this that was not the prime focus of the original research; changes in sleep patterns and quality. It is therefore not a completely

distinct topic that does not fit well with the original, and many of the concerns and interests of the original researcher will overlap with mine.

The drawback however, is that I have not been able to probe into the areas I am focusing on, by asking more questions about these topics and making these the chief focus of the interviews. However, a study of the interview transcripts reveals sufficient information is provided without this taking place. Furthermore, the more general focus allows me an appreciation of how changes in sleep interrelate with many other aspects of becoming a mother. It also prevents me from biasing results by potentially pushing for particular information rather than allowing it to emerge naturally.

The original researcher approached her analysis from a psychodynamic perspective, whereas mine is more sociological. Despite this difference in theoretical approach, the data remains able to be analysed from both perspectives, as the topic is one that lends itself well to differing theoretical angles. Furthermore, the original psychoanalytic aims have not narrowed the interviews to only providing information suited to this, as the questions remain general and adaptable.

The second consideration highlighted was **‘the problem of not having been there’**. I am unable to become privy to the interview context or the extent to which the interviewer influenced what was said. However, the transcripts have been well archived and have some background information provided with them concerning the setting of the interview and some basic characteristics of the interviewees. I adopt Van Den Berg’s (2005) view that the focus can be on the interviewee and what they say, rather than the interviewer. However I maintain an awareness that there may be some contextual effects which do influence this, which may possibly detract from the validity of my

analysis. Furthermore, it can be noted that there was more than one interviewer, who would have had their own styles and ways of conducting the interview, and therefore some aspects of the interview context and the interviewer-interviewee relationship will differ amongst the individual transcripts. The original analyser was also therefore not present for all interviews herself yet still felt able to analyse them.

The final issues discussed were the ethical considerations of factors such as **consent and confidentiality**. The data set was obtained from the UKDA Qualidata service, who I consider to have made such issues a paramount concern with strict guidelines regarding consent and anonymisation. The sample members provided initial informed consent and had the project clearly explained to them. The transcripts did not contain identifiable information and adhered to these standards, and this does not appear to in any way detract from the usefulness of the interview content.

To summarise, whilst there are areas of doubt concerning the secondary analysis of qualitative data there are also counter arguments to these points. There is certainly however a great need to be thoughtful and considerate when choosing a data set in order to minimise these potential limitations. I believe that reusing 'Becoming a Mother' for my specific research aims represents a suitable choice. There is also a need to acknowledge and reflect upon the issues of reflexivity and context, and note how not being present when the information was initially collected may, whilst not rendering reuse unproductive, shape and influence the reanalysis that takes place, and to comment on these when embarking on this reanalysis.. As Van Den Berg (2005) argues, the possibilities of reusing qualitative data should not be restricted by constructing paradigmatic barriers that suggest it should not be reanalysed. Instead, If steps are taken to



## 5.2 Secondary analysis of qualitative data

limit any potential weakness of this method, the benefits and possibilities of reuse can be taken advantage of.

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